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GROUNDWATER INTERIM RESPONSE ACTION PLAN (IRAP) – JANUARY 29, 2009

ADDENDUM #1 – JUNE 6, 2011

Disclaimer:" This document has not received approval from the Michigan Department of Environmental Quality (MDEQ). This document was prepared pursuant to a Judicial Consent Judgment. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDEQ.

Ford-Kingsford Products Facility
(Court Case Number 04-1427-CE)

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ENVIRONMENT

Subject:
Addendum to the Groundwater Interim Response Action Plan
Ford-Kingsford Products Facility, Court Case Number 04-1427-CE, Kingsford, Michigan

Dear Mr. Austin:

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Our ref:
WI001275.0001

ARCADIS, on behalf of Ford Motor Company (Ford) and The Kingsford Products Company (KPC), has prepared this addendum to the document entitled "*Groundwater Interim Response Action Plan, Ford-Kingsford Products Facility (Court Case Number 04-1427-CE)*" (GW IRAP) dated January 29, 2009, previously submitted to the Michigan Department of Environmental Quality (MDEQ). The purpose of this addendum is to present the monitoring plans for the site-wide groundwater.

INTRODUCTION

The current groundwater monitoring in the Area of Concern (AOC) at the Ford-Kingsford Products Facility (Site) in Kingsford, Michigan (Figure 1) consists of a combination of monitoring associated with the groundwater extraction system, monitoring in connection with the groundwater/surface water interface (GSI) mixing zone outside of the hydraulic capture of the groundwater extraction system, monitoring of dissolved methane, and monitoring of other select areas across the Site.

The requirements for the groundwater extraction system performance and the GSI mixing zone monitoring were originally defined in the report entitled "*Addendum Performance Monitoring Plan-Groundwater Extraction System, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case No. 04-1427-CE*", dated September 1, 2006. This document was approved by the MDEQ in a letter dated November 9, 2006. In June 2008, ARCADIS requested a reduction in the sampling parameters and frequency of monitoring for the groundwater extraction system performance monitoring in a document entitled, "*Request for Modifications to Constituent Analysis and Frequency of Monitoring for Groundwater Extraction System, Ford-Kingsford Products Facility, Kingsford, Michigan",* dated June 24, 2008. The MDEQ approved the requested modifications in a letter dated January 5,

2009. Monitoring of dissolved methane is conducted as part of the annual AOC perimeter monitoring, and monitoring of other selected areas is conducted in accordance with the applicable IRAP for those areas.

The GW IRAP was prepared to evaluate groundwater quality, exposure pathways, and document the groundwater interim response actions that have been implemented for the AOC at the Site. The GW IRAP also presented planned response activities for addressing groundwater within the AOC to meet the objectives of the Consent Judgment (CJ).

This Addendum to the GW IRAP specifically focuses on and presents the plan for monitoring of the site-wide groundwater conditions (which may be modified in the RAP).

BACKGROUND

Site-wide groundwater quality is described in the GW IRAP and the Remedial Investigation (RI) Report for the Ford-Kingsford Products Facility. These reports identify the concentrations and distribution of the constituents present in the groundwater throughout the Site and AOC.

Groundwater characteristics have been evaluated through the collection of groundwater samples from approximately 170 monitoring wells. The groundwater samples evaluated include samples collected throughout the Site, including along the Menominee River, potential source areas, and residential and non-residential areas. In total, the groundwater data set for the Site and AOC is comprised of nearly 700 groundwater samples.

GROUNDWATER MONITORING

The current groundwater monitoring programs for the interim response actions at the Site consist of monitoring the groundwater extraction system and associated hydraulic capture/control, monitoring in connection with the GSI mixing zone, monitoring of dissolved methane at the perimeter of the AOC, and monitoring of select areas across the Site. The following discussion will present the program to be implemented to monitor and document the overall groundwater conditions site-wide.

All current monitoring programs will be continued in accordance with established procedures to maintain compliance with the CJ. This program incorporates some of

the existing monitoring program details, but is intended to be an additional component for the overall monitoring at the Site.

The program for site-wide groundwater includes monitoring of dissolved methane at the perimeter of the AOC and monitoring of select locations for overall groundwater quality and associated trends over time throughout the AOC.

AOC Perimeter Monitoring

The AOC perimeter component of the monitoring program will consist of sampling Monitoring Wells GM-15, GM-59, GM-61, GM-68, and GM-85 for dissolved methane. These wells were selected based on their strategic locations around the AOC perimeter and represents a continuation of current locations monitored for dissolved methane. The monitoring wells will be sampled on an annual basis to ensure that the AOC boundary is appropriate. In addition to these five perimeter monitoring locations, additional wells will also be sampled for dissolved methane, as discussed below.

Site-Wide Monitoring

The overall groundwater quality/long-term trend component of the monitoring program will consist of 20 selected monitoring wells to be sampled for total organic carbon (TOC) and dissolved methane. The 20 monitoring wells selected include Monitoring Wells GM-2B, GM-6, GM-7, GM-13, GM-17, GM-24C, GM-32, GM-34B, GM-36, GM-62A, GM-62B, GM-62C, GM-63A, GM-63B, GM-84, GM-86A, GM-86B, GM-87A, GM-87B, and MW-8. These wells were selected based on their strategic locations across the Site and they are representative of groundwater conditions within the site-wide plume. The locations are consistent with depths and geologic zones identified during the RI. The groundwater collected from these wells exhibit variable constituent concentrations, from the area of the Site with the highest concentrations to other areas with lesser concentrations, and provide a complete site-wide evaluation of groundwater conditions. To ensure representative coverage over a long-term timeframe, and to maintain data collection efficiency, a subset of 10 selected monitoring wells will be sampled on an annual basis, with the alternative 10 well subset to be sampled the following year. This alternating annual frequency will be continued going forward as outlined in Table 1.

In addition to the 20 monitoring wells to be sampled on the rotating annual frequency for TOC and dissolved methane, a subset of 6 of the 20 monitoring wells (GM-2B, GM-13, GM-32, GM-62A, GM-62B, and GM-62C) will be sampled for analysis of the revised

Target Compound List (TCL), hereafter titled the Monitoring TCL (MTCL). The TCL (or MTCL) will be revised over time as appropriate. These monitoring wells will be sampled to monitor the overall concentration trends of specific constituents in the groundwater over time. These wells were again selected for their strategic locations within the groundwater plume and represent groundwater conditions with some of the highest constituent concentrations, providing an appropriate overview of the groundwater quality over time. These 6 monitoring wells will be sampled once every 5 years. The constituents included in the MTCL analysis are listed in Table 2.

CLOSING

Interim response actions are continuing at the Site to maintain compliance with the CJ. Preparation of a draft Remedial Action Plan (RAP) has been initiated. The RAP will describe additional aspects of the groundwater monitoring programs, and may modify the GW IRAP and this addendum. Pursuant to our discussions, ARCADIS, on behalf of Ford/KPC, is requesting MDEQ approval of the GW IRAP and this Addendum. Following receipt of MDEQ approval, these monitoring programs for the overall Site will be initiated.

If you have any questions, or require any further information, please do not hesitate to contact the undersigned.

Sincerely,

ARCADIS U.S., Inc.

Richard L. Studebaker Jr., PE
Vice President/Project Manager

ARCADIS

Table 1. Site-Wide Groundwater Sampling Program, Ford-Kingsford Products Facility, Kingsford, Michigan.

	Total Organic Carbon	Dissolved Methane	Monitoring Target Compound List	Water Level Monitoring
AOC Perimeter Monitoring				
GM-15	--	Annual	--	Annual
GM-59	--	Annual	--	Annual
GM-61	--	Annual	--	Annual
GM-68	--	Annual	--	Annual
GM-85	--	Annual	--	Annual
Site-Wide Monitoring				
GM-2B	Bi-Annual	Bi-Annual	5 Year	Annual
GM-6	Bi-Annual	Bi-Annual	--	Annual
GM-7	Bi-Annual	Bi-Annual	--	Annual
GM-13	Bi-Annual	Bi-Annual	5 Year	Annual
GM-17	Bi-Annual	Bi-Annual	--	Annual
GM-24C	Bi-Annual	Bi-Annual	--	Annual
GM-32	Bi-Annual	Bi-Annual	5 Year	Annual
GM-34B	Bi-Annual	Bi-Annual	--	Annual
GM-36	Bi-Annual	Bi-Annual	--	Annual
GM-62A	Bi-Annual	Bi-Annual	5 Year	Annual
GM-62B	Bi-Annual	Bi-Annual	5 Year	Annual
GM-62C	Bi-Annual	Bi-Annual	5 Year	Annual
GM-63A	Bi-Annual	Bi-Annual	--	Annual
GM-63B	Bi-Annual	Bi-Annual	--	Annual
GM-84	Bi-Annual	Bi-Annual	--	Annual
GM-86A	Bi-Annual	Bi-Annual	--	Annual
GM-86B	Bi-Annual	Bi-Annual	--	Annual
GM-87A	Bi-Annual	Bi-Annual	--	Annual
GM-87B	Bi-Annual	Bi-Annual	--	Annual
MW-8	Bi-Annual	Bi-Annual	--	Annual

5 Year Wells will be sampled once every 5 years.
Annual Wells will be sampled Annually.
Bi-Annual A subset of 10 wells will be sampled on a rotating annual frequency for TOC and dissolved methane with the alternative 10 wells to be sampled the following year.

Table 2. Monitoring Target Compound List, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
VOCs		
1,1,1,2-Tetrachloroethane	8260B	1
1,1,2-Trichloroethane	8260B	1
1,1-Dichloroethane	8260B	1
1,1-Dichloroethene	8260B	1
1,2,4-Trimethylbenzene	8260B	1
1,2-Dibromo-3-chloropropane	8260B	5
1,2-Dichloroethane	8260B	1
1,2-Dichloroethene, total	8260B	2
1,2-Dichloropropane	8260B	1
1,3,5-Trimethylbenzene	8260B	1
1,3-Dichlorobenzene	8260B	1
2-Butanone (MEK)	8260B	50
2-Hexanone	8260B	50
4-Methyl-2-pentanone (MIBK)	8260B	50
Acetone	8260B	100
Acrylonitrile	8260B	25
Benzene	8260B	1
Bromochloromethane	8260B	1
Bromodichloromethane	8260B	1
Bromoform	8260B	1
Bromomethane	8260B	1
Carbon disulfide	8260B	5
Carbon tetrachloride	8260B	1
Chlorobenzene	8260B	1
Chloroethane	8260B	1
Chloroform	8260B	1
Chloromethane	8260B	1
cis-1,2-Dichloroethene	8260B	1
cis-1,3-Dichloropropene	8260B	1
Dibromomethane	8260B	1
Diethylether	8260B	10
Ethylbenzene	8260B	1
Furan	8260B	10
Isopropylbenzene	8260B	1
Methyl (tert) butyl ether	8260B	5
Methyl iodide	8260B	5
Methylene chloride	8260B	1
n-Propylbenzene	8260B	1
Propionitrile	8260B	25
Styrene	8260B	1
Tetrachloroethene	8260B	1
Tetrahydrofuran	8260B	10
Toluene	8260B	1
trans-1,2-Dichloroethene	8260B	1
trans-1,3-Dichloropropene	8260B	1

Footnotes on Page 4.

Table 2. Monitoring Target Compound List, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
VOCs (continued)		
trans-1,4-Dichloro-2-butene	8260B	5
Trichloroethene	8260B	1
Vinyl chloride	8260B	1
Xylene (total)	8260B	3
SVOCs		
1,4-Dichlorobenzene	8270C	5
2,3-Dimethylphenol	8270C	10
2,4-Dimethylphenol/2,5-Dimethylphenol*	8270C	5
2,6-Dimethylphenol	8270C	10
2-Methylnaphthalene	8270C	5
2-Methylphenol	8270C	5
2-Nitrophenol	8270C	5
3,4-Dimethylphenol	8270C	10
3-Methylphenol/4-Methylphenol (m&p-cresol)*	8270C	10
4-Chloro-3-methylphenol	8270C	5
Anthracene	8270C	5
Benzo(a)anthracene	8270C	5
Benzo(a)pyrene	8270C	5
Benzo(b)fluoranthene	8270C	5
Benzo(g,h,i)perylene	8270C	5
Benzo(k)fluoranthene	8270C	5
bis(2-Ethylhexyl)phthalate	8270C	5
Butylbenzylphthalate	8270C	5
Carbazole	8270C	5
Chrysene	8270C	5
Di-n-butyl phthalate	8270C	5
Di-n-octyl phthalate	8270C	5
Dibenzo(a,h)anthracene	8270C	5
Diethyl phthalate	8270C	5
Dimethyl phthalate	8270C	5
Fluoranthane	8270C	5
Hexachlorobenzene	8270C	5
Indeno(1,2,3-cd)pyrene	8270C	5
Naphthalene	8270C	5
Phenanthrene	8270C	5
Phenol	8270C	5
Pyrene	8270C	5
Alcohols		
1,4-Dioxane	8270C	5
2-Pentanone	8260B	1,000
2-Picoline	8270C	10
Acetonitrile	8260B	50
Ethanol	8015B	1,000

Footnotes on Page 4.

Table 2. Monitoring Target Compound List, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
Alcohols (continued)		
Ethyl Acetate	8015B	5,000
Ethylene Glycol	8015B	10,000
Isobutanol	8015B	1,000
Isopropanol	8015B	1,000
Methanol	8015B	1,000
n-Butanol	8015B	1,000
n-Propanol	8015B	1,000
Tert-Butyl Alcohol	8015B	1,000
Aldehydes		
** Acetaldehyde	8315A	100
** Butanal	8315A	100
** Crotonaldehyde	8315A	100
** Cyclohexanone	8315A	100
** Decanal	8315A	100
** Formaldehyde	8315A	100
** Heptanal	8315A	100
** Hexanal	8315A	100
** m-Tolualdehyde	8315A	100
** Nonanal	8315A	100
** Octanal	8315A	100
** Paraldehyde	8015B	100
** Pentanal	8315A	100
** Propanal	8315A	100
Metals		
Aluminum	6020	200
Antimony	6020	50
Arsenic	6020	20
Barium	6020	100
Beryllium	6020	1
Cadmium	6020	0.5
Calcium	6020	100
Chromium	6020	5
Cobalt	6020	10
Copper	6020	25
Iron	6020	100
Lead	6020	3
Magnesium	6020	100
Manganese	6020	20
Mercury	U.S. EPA 7470A	0.2
Molybdenum	6020	10
Nickel	6020	25

Footnotes on Page 4.

Table 2. Monitoring Target Compound List, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
Metals (continued)		
Potassium	6020	250
Selenium	6020	5
Silver	6020	0.2
Sodium	6020	1,000
Thallium	6020	2
Titanium	6020	50
Vanadium	6020	20
Zinc	6020	20
Other Constituents		
BOD	U.S EPA 405.1	2,000
Chloride	U.S. EPA 325.2	1,000
COD	U.S EPA 410.4	20,000
#Dissolved Methane	RSK 175	1.0
Nitrate	U.S. EPA 353.2	50
Nitrite	U.S. EPA 353.2	50
Nitrogen (ammonia)	U.S. EPA 350.1	30
Sulfate	U.S. EPA 375.4	5,000
Sulfide	U.S. EPA 376.1	1,000
TOC	U.S. EPA 415.1	1,000
Acetic Acid/Acetate	VFA	NA

Practical quantitation limits per Test America, Trimatrix, and Microseeps Laboratories SOPs.

* Compounds co-elute; therefore, the methylphenol and dimethylphenol isomers are reported as 3-methylphenol/4-methylphenol and 2.4-dimethylphenol/2,5-dimethylphenol, respectively.

** Analysis to be performed by TriMatrix.

\# Analysis to be performed by Microseeps.

BOD Biological Oxygen Demand.

COD Chemical Oxygen Demand.

µg/Kg Micrograms per kilogram.

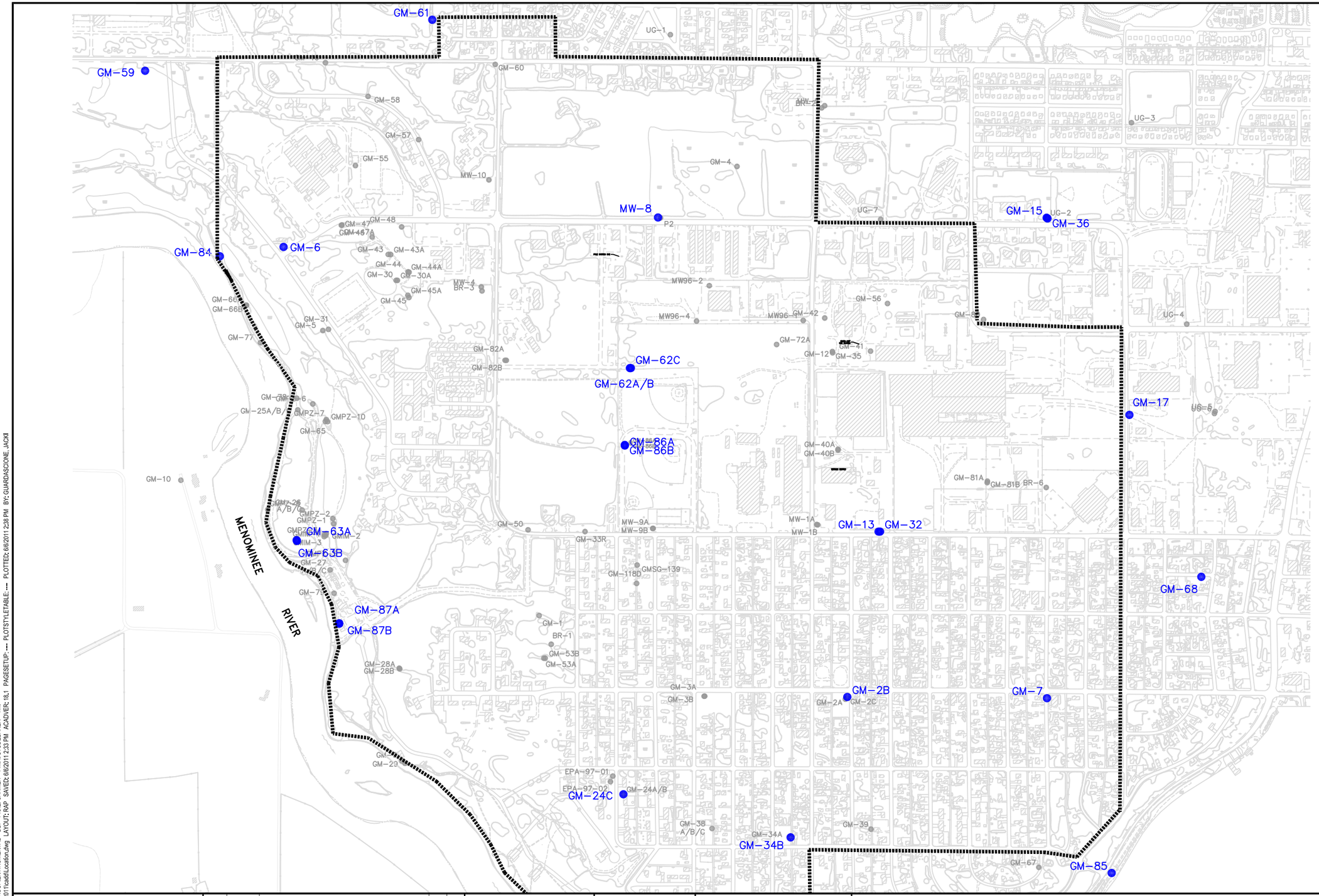
µg/L Micrograms per liter.

NA Not applicable.

SVOCs Semi-Volatile Organic Compounds.

TOC Total Organic Carbon.

VOCs Volatile Organic Compounds.



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Professional Engineer's No.

State	Date Signed	Project Mgr.
MI		R. STUDEBAKER
Designed by	Drawn by	Checked by

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SITE-WIDE MONITORING LOCATIONS

ARCADIS Project No.
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Groundwater Interim Response Action Plan (IRAP)

Ford-Kingsford Products Facility
(Court Case Number 04-1427-CE)

January 2009

5.78.1 – 1/29/09

ARCADIS

Groundwater Interim Response Action Plan (IRAP)

Ford-Kingsford Products Facility (Court Case Number 04-1427-CE)

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Tables

Figures

Appendix

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Executive Summary

ARCADIS, on behalf of Ford Motor Company (Ford) and The Kingsford Products Company (KPC), has prepared this Interim Response Action Plan to evaluate exposure pathways and document the interim response actions that have been implemented for the Area of Concern (AOC) at the Ford-Kingsford Products Facility (Site) in Kingsford, Michigan. The interim response actions are outlined in Section 4.1 of the Consent Judgment between the Michigan Department of Environmental Quality (MDEQ), Ford, and KPC, dated October 26, 2004, Court Case Number 04-1427-CE (Consent Judgment). Figure 1-1 illustrates the Site location. The Consent Judgment outlines the response objectives and activities required for the Site. This IRAP documents the investigations and response activities that have been undertaken or are currently underway, and planned future response activities for addressing contaminated groundwater within the AOC to meet the objectives of the Consent Judgment[1].

Land use within the AOC has changed significantly over the past one hundred years. The City of Kingsford was incorporated in the 1920s, and the land, which was primarily agricultural, was developed into industrial and residential property. Current land use in the AOC is a mixture of industrial, commercial, and residential. Past industrial activities included Ford's auto parts manufacturing and charcoal production facility which operated from approximately 1925 to 1951. In December 1951, Kingsford Chemical Company purchased the Former Plant Site and continued the woodworking activities, wood product distillation, and charcoal production until approximately 1961. Many other industries, including manufactured gas plants, foundries, mining, and timber processing have historically operated in the Kingsford area.

Prior investigation activities have identified potential source areas for impacts to groundwater which include the former Riverside Disposal Area (RDA), the former waste lagoons known as the Northeast Pit (NE Pit) and Southwest Pit (SW Pit), the

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[1] This IRAP is not intended to, and does not address gas phase methane within the AOC. The Methane Interim Response Action Plan, dated April 2007, addressed that issue and was approved by the MDEQ on April 30, 2008.

Former Plant Site (FPS), and the former West Breen Avenue Disposal Area (WBADA). The Consent Judgment required a response action for these areas; therefore, IRAPs have been submitted, approved and implemented for the RDA, NE Pit, SW Pit and the FPS; and a report outlining response activities taken at the WBADA has been submitted and is awaiting approval by the MDEQ. In addition, a groundwater extraction and treatment system has been operating along the east bank of the Menominee River since December 2005 to capture groundwater containing constituents exceeding applicable acute and chronic groundwater surface water interface criteria.

Groundwater characteristics throughout the AOC have been evaluated through the collection of groundwater samples by ARCADIS from approximately 160 monitoring wells and nine residential water supply wells. Grab groundwater samples were also collected from several of the soil borings at selected intervals and from several locations within the groundwater seep area near the Menominee River. The groundwater sampling results were compared to State of Michigan cleanup criteria and screening levels. In addition, a 3-D chemical model was created to aid in understanding the contaminant distribution within the groundwater system and to define areas of detectable contaminant concentrations.

Prior to the installation of the groundwater extraction and treatment system, a three-phase pilot study was implemented to support the design. The pilot tests were completed to verify that groundwater extraction could prevent the migration of contaminated groundwater into the Menominee River and that biological treatment utilizing a submerged fixed-film system would be an effective remedy to treat the contaminated groundwater. The pilot test determined that hydraulic capture of groundwater was possible; however, suspended growth was a much more effective means of primary biological treatment than fixed-film biological treatment. Therefore, the pilot test system was modified from two fixed-film bioreactors to one suspended growth bioreactor followed by a fixed-film biological treatment polishing step. This configuration was then used to design the full scale treatment system.

Implementation of investigation activities and interim response actions have fully delineated the presence of and appropriately addressed groundwater contamination in the AOC. Investigation activities included installation of approximately 260 soil borings, 230 monitoring wells and piezometers, 60 extraction wells, 500 soil vapor probes, and 55 test pits to define the hydrogeologic setting and the distribution of constituents in the groundwater within the AOC. In addition, response actions included excavation and off-site disposal of contaminated materials from the RDA, NE Pit, SW Pit and the FPS; installation of a 30-inch soil cover at the RDA and SW Pit; installation of an impermeable cover consisting of a 40-mil high density polyethylene liner with an

asphalt surface at the NE Pit; installation of a groundwater extraction and treatment system adjacent to the east bank of the Menominee River; and restrictive covenants. A Water Well Restriction Ordinance for portions of the City of Kingsford and Breitung Township in the AOC are under discussion with the City and Breitung Township. These actions will be continued, as necessary, to comply with the Consent Judgment.

1. Introduction

ARCADIS, on behalf of Ford Motor Company (Ford) and The Kingsford Products Company (KPC), has prepared this Interim Response Action Plan (IRAP) to evaluate exposure pathways and document the interim response actions that have been implemented for the Area of Concern (AOC) of the Ford-Kingsford Products Facility (Site) in Kingsford, Michigan. The interim response actions are outlined in Section 4.1 of the Consent Judgment between the Michigan Department of Environmental Quality (MDEQ), Ford, and KPC, dated October 26, 2004, Court Case Number 04-1427-CE (Consent Judgment). Figure 1-1 illustrates the Site location. The Consent Judgment outlines the response objectives and activities required for the Site. This IRAP documents the investigations and response activities that have been completed or are currently underway, and planned future response activities for addressing contaminated groundwater within the AOC to meet the objectives of the Consent Judgment.

The cleanup criteria used for this evaluation are in accordance with Operational Memorandum #1 (Part 201 Standards), dated January 23, 2006; and the Part 4 Water Quality Standards for Final Acute Values and the Final Chronic Values as defined in Rule 323.1057, dated December 11, 2006. This IRAP was prepared in accordance with the MDEQ Remedial Action Plan (RAP) guidance document regarding format and content for remedial action plans designed to meet criteria (Section 2.0120a(1) dated March 2004).

ARCADIS has performed a remedial investigation of the Site. A draft Remedial Investigation Report (herein referred to as the June 2002 RI Report) has been prepared and submitted to the MDEQ. During this investigation, potential source areas for impacts to groundwater were identified and include the former Riverside Disposal Area (RDA), the former waste lagoons known as the Northeast Pit (NE Pit) and Southwest Pit (SW Pit), the Former Plant Site (FPS), and the former West Breen Avenue Disposal Area (WBADA). It should be noted that all material or constituents present in these potential source areas are not solely related to Ford or KPC; however, the Consent Judgment for the Site outlined groundwater response actions, which include the following performance objectives:

1. Eliminate the migration at a certain boundary of contaminated groundwater that is above applicable groundwater/surface water interface (GSI) criteria toward the Menominee River.

2. Provide treatment to comply with the law for any contaminated groundwater extracted.

To comply with these and other Consent Judgment objectives, IRAPs have been submitted, approved and implemented for the RDA, NE Pit, SW Pit and the FPS; and a report outlining response activities taken at the WBADA has been submitted and is awaiting approval by the MDEQ. In addition, a groundwater extraction and treatment system has been installed near the east bank of the Menominee River to intercept and treat groundwater prior to its venting to the river.

2. Site Background and History

Prior to completion of the engineering evaluation/cost analysis (EE/CA) investigation activities in 1997 and 1998, dissolved-phase methane was detected in groundwater in the residential areas south and west of the former waste lagoons and the FPS. EE/CA investigation activities were initiated with the primary goal of evaluating methane generation, fate, and transport in the subsurface. In spring 1998, the MDEQ assumed oversight activities from the United States Environmental Protection Agency (U.S. EPA) and the investigation was expanded to include additional investigation of potential source areas, to fill data gaps from the EE/CA, and to evaluate groundwater venting to the Menominee River. The focus of the groundwater investigation activities was within the AOC. Investigation activities by ARCADIS were continuous from 1997 through completion in 2004, with ongoing monitoring and evaluation continuing.

2.1 Site Setting

The City of Kingsford is located in southwestern Dickinson County, in the south-central part of Michigan's Upper Peninsula (Figure 2-1). The City of Kingsford is bounded by the Menominee River on the west and south, by Breitung Township on the southeast, and by the City of Iron Mountain on the north and east.

The Site is located within a light industrial, commercial, and residential area of the City of Kingsford and Breitung Township. The AOC is generally bounded by the Menominee River to the west and south; Michigan State Highway 95 (Carpenter Avenue), Hooper Street, North Boulevard, and Balsam Street to the east; and East Boulevard, Pyle Drive, and Woodward Avenue to the north, as shown on Figure 1-1. The AOC is mostly located within Sections 1, 2, 11, and 12 of Township 39N, Range 31W of Dickinson County, and encompasses the potential source areas, and residential and commercial areas as presented on Figure 2-1.

2.2 Topography

A topographic base map of the Kingsford area was prepared as part of the area mapping and is presented on Figure 2-2. The land surface immediately north of the City of Kingsford is dominated by Pine Mountain with an elevation of approximately 1,500 feet relative to mean sea level (ft msl). South of Pine Mountain to Woodward Avenue in the City of Kingsford, the topography is irregular and contains numerous hills and hollows between approximately 1,120 and 1,140 ft msl.

Three landform terraces dominate the topography from Woodward Avenue south to the Menominee River (Figure 2-2). The uppermost terrace (Upper Terrace) consists of a

large tract of land with a flat surface at an elevation of approximately 1,120 ft msl, which extends across most of the City of Kingsford. This terrace contains occasional isolated, enclosed depressions up to approximately 40 feet deep that are glacial kettle landforms. These kettles are natural features formed by blocks of ice that broke off receding continental glaciers and subsequently melted. Several of the glacial kettle features have been filled in and are no longer visible in the topographic surface (e.g., NE and SW Pits).

The Upper Terrace is separated from a second terrace (Lower Terrace) by a steep northwest-southeast downward trending slope in the topography. The Lower Terrace occupies the southern and southwestern portions of the area studied. The topography on the Lower Terrace is more irregular than the Upper Terrace. From the Upper Terrace, the ground surface on the Lower Terrace slopes gradually downward to the south to approximately 1,080 ft msl, before rising gradually to an elevation of approximately 1,110 ft msl. The southern edge of the Lower Terrace slopes steeply down to a third terrace (Riverside Terrace), which occurs along the banks of the Menominee River at an elevation of approximately 1,045 ft msl. The Riverside Terrace is found along the south and western sides of the City of Kingsford and Breitung Township. Further north and west, the Upper Terrace directly abuts the Menominee River (Figure 2-2).

2.3 Regional Geologic Setting

Metamorphosed precambrian igneous and sedimentary rocks make up the bedrock that underlies the City of Kingsford and Breitung Township (Milstein, 1987). Two bedrock formations are present in the area; the Lower Precambrian Quinnesec consisting of altered volcanic rocks, and the Middle Precambrian Michigamme Slate, consisting of primarily slate. A major east-west striking fault, downthrown to the north, has been documented by the United States Geological Survey (USGS) (Bayley, Dutton, and Lamey, 1996) to exist within the area studied, south of the FPS. The fault separates the Quinnesec and Michigamme Formations, as well as Green Schist and Oligoclase-Amphibole regional metamorphic isofacies.

Regionally, bedrock is overlain by glacially derived unconsolidated deposits, except at several locations south of the Ford Airport and close to the Menominee River near Highway M-95, where bedrock is occasionally exposed. Beneath the central portion of the AOC, the bedrock forms a depression with a monadnock located within the depression.

The unconsolidated deposits in the area include glacial moraines, present south (Menominee Moraine) and north (Marenisco Moraine) of the area (Westjohn et. al.,

1996; Martin, 1995), and glaciofluvial (glacial river) deposits that form the uppermost glacial deposits in the area. These deposits may be pro-graded outwash that was deposited during formation of the Marenisco Moraine. A morphologic feature of the outwash is the presence of glacial kettles.

The unconsolidated deposits that overlie the bedrock consist of a complex sequence of interbedded gravel, sand, silt and clay; with significant variations both vertically and laterally over short distances. These deposits are consistent with a glaciolacustrine (glacial lake) depositional environment. In some locations of the AOC, a dense, silt/clay till unit, known as Lodgement Till, is present on top of the bedrock. Overall, coarser-grain deposits appear to be more abundant in the eastern part of the area studied and the unconsolidated deposits generally become increasingly finer-grain to the south and west.

Finer-grain silt and clay deposits are locally absent in some areas immediately adjacent to the banks of the Menominee River. In these areas, if bedrock is not exposed, a succession of gravel and coarse-grain to medium-grain sand rests on top of bedrock.

The principal soil in the Kingsford area is the Pence sandy loam (Soil Conservation Service [SCS], 1989). The unit is nearly level, well drained, and is typically found on flats and knolls in upland areas. The Channing fine sand loam and Zimmerman fine sand also occur along the Menominee River drainage ways and ridges, respectively (SCS, 1989).

2.4 Regional Hydrogeology

Groundwater flowing through the unconsolidated deposits beneath the AOC migrates in a southwesterly direction towards the Menominee River. Due to its dense nature, the bedrock is generally considered the base of groundwater flow in the overlying unconsolidated deposits. Investigation activities completed in the Kingsford area indicate that the faults present within the bedrock are generally sealed by secondary cementation and do not act as conduits for groundwater flow. The hydraulic conductivity of the unconsolidated deposits is variable and corresponds to grain size. Finer-grain sand, silt and clay have lower hydraulic conductivities and hinder groundwater flow. In contrast, coarser-grain sand and gravel have higher hydraulic conductivity and allow groundwater to move more easily through them. The coarser-grain sand and gravel are preferential pathways for transmitting groundwater in the area.

The physical characteristics of the unconsolidated glacial deposits (glaciofluvial and glaciolacustrine depositional environments) suggest that groundwater flowing beneath

the AOC follows irregular flow paths. Groundwater flow is in part controlled by the variable thickness and hydraulic conductivity of the saturated deposits. Saturated thickness is influenced by bedrock topography and the water table configuration, both of which vary significantly beneath the AOC.

In general, groundwater flows laterally from areas of higher elevation to lower elevations along these preferential pathways. Furthermore, groundwater level measurements at paired wells indicate that a downward vertical component of the hydraulic gradient is present throughout most of the AOC, except near the Menominee River where the vertical component of the hydraulic gradient has always been observed as an upward flow condition.

Groundwater vents into the Menominee River because the pressure head of the groundwater is greater than the pressure head of the surface water of the Menominee River. An exception to the upward groundwater flow may be during unusual high water level events in the Menominee River, when an increased pressure head exists. The high water levels could cause a short-term downward gradient in the shallow groundwater system. The upward groundwater movement from the deeper groundwater system would be unaffected by high surface water levels, as the pressure head in the deeper groundwater system is still higher than the pressure head of the surface water during high water events in the Menominee River.

2.5 Hydrology

The Menominee River is the principal hydrologic feature in the AOC. The river flows to the southeast and forms the southern and western boundaries of the AOC. Year-round flow and the surface water level in the Menominee River is regulated by a number of dams, including a dam operated by the Wisconsin Electric Power Company (WEPCO) that is located northwest of the City of Kingsford (The Old Ford Dam) and the Big Quinnesec Dam downriver of the City. Apart from the Menominee River, no other surface water features are currently present south of Woodward Avenue.

A southerly flowing creek, known as Sewer Creek, once flowed from Crystal Lake to the Menominee River (Figure 2-1). Historic records indicate that this creek was used as an open sewer by the surrounding communities. The open sewer flowed south a short distance west of the current route of Highway M-95, carrying sewage from Iron Mountain, the City of Kingsford and Breitung Township. This open sewer has long since been contained in subsurface concrete piping that terminates at the Iron Mountain/Kingsford Wastewater Treatment Plant (IM/K WWTP).

In addition to Crystal Lake, there are a number of surface water features in the Kingsford area north and northeast of the City. Some of the lakes, such as Chapin Pit, are former iron mines that were subsequently abandoned and flooded. However, these surface water features are outside of the AOC and are not hydraulically relevant to the Site as they are upgradient of the Site.

2.6 Climate

The Upper Peninsula of Michigan is located between Lake Superior and Lake Michigan and has a variable climate. The south-central portion of the Upper Peninsula, where Kingsford is located, has relatively temperate conditions. Climatological data are available for Iron Mountain, Michigan which is directly adjacent to Kingsford. Review of data monitored between 1971 and 2000 indicates that the daily mean temperature in Iron Mountain ranges from 12 degrees Fahrenheit (°F) in January to 68 °F in July. The average annual temperature for the Iron Mountain station is 41 °F. The average number of days of frost is 124 days, and the average deepest frost depth is 19.3 inches. In the Iron Mountain area, the range of barometric pressure is from 29.04 to 30.72 inches of mercury.

The area receives approximately 29 inches of precipitation annually, most of which occurs in the summer and early fall. The average annual snowfall is 63.3 inches (5.3 feet).

Wind data, monitored at Ford Airport (in Kingsford) from 1997 to present, indicate a predominant wind direction from the northwest with the broadest wind speed class in the 7 to 12 miles per hour range.

2.7 Groundwater Use

The City of Kingsford supplies water to both residents and industry for drinking, household, and industrial uses. The source of the municipal groundwater is outside of the AOC. The forecasted groundwater use within the AOC is continued residential, municipal, commercial, and industrial, with the potable water supply solely from municipal sources (both for the City of Kingsford and the portion of Breitung Township located within the AOC) and not from private wells.

The City of Kingsford supplies water service from groundwater pumped from deep within the unconsolidated sand and gravel, north and east of Ford Airport. These City water supply well locations are upgradient of the AOC. Based on groundwater models

by Earth, Water, and Air Resources, Inc. (EWA, 1987) and the USGS (Westjohn, 2001) the municipal wells do not influence the groundwater within the AOC and vice versa.

ARCADIS conducted a residential well survey in 1999 to identify residential water wells within the AOC. The locations of 16 potential residential wells were provided by representatives of the City of Kingsford and from citizen responses to a city-wide mailing. Efforts were made by ARCADIS to locate all 16 wells and obtain permission for abandonment to eliminate the possibility for use of or contact with potentially impacted groundwater. Four wells were found not to exist. All 12 of the existing residential wells were appropriately abandoned, and connections to the City water supply was verified and/or supplied. A water well restriction ordinance has been proposed to both the City of Kingsford and Breitung Township for the AOC, a copy of which is included as Appendix A.

2.8 Methane Sources and Occurrence

The presence of dissolved-phase methane in groundwater is generally the result of anaerobic biodegradation of organic compounds dissolved in groundwater. Degradation of constituents in groundwater will produce methane in the deeper groundwater (where the majority of the dissolved organics are present), which generally transfers from gas phase to dissolved phase as it is generated due to the higher pressures and subsequent increased solubility. Most of the organic compounds dissolved in the groundwater system occur at approximately 100 feet below land surface (ft bls) and deeper, primarily in the central and western portions of the AOC.

The majority of organic compounds at depth in the groundwater system within the AOC are the result of historic releases from the FPS to the former NE Pit. The liquid phase of these releases infiltrated the groundwater system where organic compounds dissolved in the groundwater move in the direction of groundwater flow. An IRAP has been implemented at the NE Pit to minimize future contribution of organic materials to the groundwater system, which included the installation of an engineered low-permeability cover system over remaining waste material. Review of the investigative data collected from soil, waste, and groundwater indicates that the former RDA, former SW Pit, and the FPS have very little potential to be a source of continuing releases of organic constituents in groundwater.

2.9 Historic Land Use

2.9.1 Land Use and Populations

Based on newspaper articles and published databases from the Kingsford area, it is apparent that land use around Kingsford has changed significantly over the past century. Up until the early 1920s, the area currently occupied by the City was used primarily for agriculture, timber processing and iron ore mining (within Iron Mountain). The original forest in the area was substantially cleared over the 50 years prior to 1920. During the 1920s, the City of Kingsford was incorporated and much of the agricultural land was developed into industrial and residential property.

Industrial activity in Kingsford focused on the Ford wooden auto parts manufacturing facility (FPS) situated in an area bounded to the north by Pyle Drive, to the south by Breitung Avenue, to the east by Hooper Street, and to the west by Westwood Avenue. Activities at the facility included the manufacture of wooden automobile parts, assembly of automobile bodies, production of charcoal, and wood product distillation activities.

Coincident with the FPS development, Ford commissioned the Ford Dam (which is now referred to as the WEPCO Dam) on the Menominee River on the northwest side of Kingsford to supply electricity to the plant. Residential development at this time occurred south of Breitung Avenue to the Menominee River and also in an area north of Woodward Avenue.

As Kingsford developed during the 1920s and the City of Iron Mountain continued to grow, the populations of both cities soon grew to all-time highs. From a population of 3,500 in 1885, the U.S. Census Bureau recorded the number of people living in Iron Mountain in 1930 to be 12,740. The same 1930 survey reported that the new City of Kingsford's population was 5,526. In response to the growth in population, a number of ancillary industries developed or continued to expand around Iron Mountain and Kingsford. These commercial facilities included stores, gas stations and a manufactured gas plant (MGP), which was located on the northeast border of Kingsford. During the same period, existing industries in the area, such as timber processing and iron ore mining continued to operate.

Aerial photographs taken between 1950 and 1970 indicate that little to no additional property development occurred around Kingsford. Moreover, Kingsford's population remained relatively constant at approximately 5,000 people. During this time, much of

the land on the western side of Kingsford was turned over to forestry, recreation, and residential uses from those associated with the plant operations.

2.9.2 Former Plant History

Ford and KPC have conducted several exhaustive searches through company files to determine a history of the FPS during the years of operation by Ford and KPC. The following summary, which is limited to the period from 1920 to 1961, has been compiled based on a detailed evaluation of a historical plant layout graphic and several published papers on manufacturing processes that are known to have been used at the plant.

Facilities at the FPS included: a saw mill, three body plants, drying kilns, and a wood carbonization and distillation facility to fully utilize wood by-products from the manufacturing operation. Activities conducted at the facilities included the manufacture of wooden automobile parts, assembly of automobile bodies and gliders, production of charcoal, and wood product distillation.

Construction of the FPS began in July 1920 and the saw mill was the first to begin operation in July 1921. Construction of the body plants and kilns followed and in August 1924, the distillation plants began operation.

The plant layout during the 1920s is shown on Figure 2-3. The original body plant, completed in 1921, dominated the southern area of the FPS. Construction on two additional body plants began in 1922 and lasted through March 1924. All three plants measured 640 feet by 120 feet and were divided into two main sections.

The western portion of the FPS housed 52 kilns where the timber was dried and the moisture content decreased from approximately 40 to 7 percent. The northern area of the FPS contained the wood by-product recovery operations including the distillation and carbonization buildings. The saw mill was centrally located, just south of the carbonization building. The eastern area of the FPS included the automobile assembly stations and the shipping department where parts were prepared for transport.

Due to the large amount of wood waste and wood by-products generated at the facility, an important aspect of the operations included by-product recovery. This recovery utilized wood pyrolysis by the Badger-Stafford Process. Pyrolysis is a destructive distillation process in which organic substances such as wood are decomposed by heat in the absence of oxygen to produce charcoal and other wood by-products. The

process began in the carbonization building. Scrap wood was initially heated to around 300 °F in rotary driers to further reduce the moisture content and then passed through a magnetic separator in order to remove tramp iron. The wood was then delivered into the Badger-Stafford retorts, which were sealed vessels approximately 40 feet high and 10 feet in diameter with a heat insulating wall 18 inches thick. To initiate pyrolysis, the wood was heated to approximately 1,000 °F in the absence of oxygen.

This process generated charcoal, pyroligneous acid, and non-condensable gases as direct products. The charcoal is a solid product that was emptied from the bottom of the retorts in the carbonization building and further processed into charcoal briquettes. Excess charcoal was primarily burned in the powerhouse as fuel. The other products were gaseous at elevated temperatures and passed through a condenser. The non-condensable fraction, which included carbon monoxide, carbon dioxide, methane, and nitrogen in substantial quantities (with minor amounts of hydrogen, oxygen, and ethane) was burned in the powerhouse while the condensable fraction, known as pyroligneous acid, was transferred to the distillation building for further processing.

Suspended wood tar was separated from the pyroligneous acid in copper settling tanks. The settled wood tar was distilled to produce creosote oil that was returned to the powerhouse as fuel and pitch. The pyroligneous acid was distilled to produce substances such as methyl alcohol, methyl acetate, methyl acetone, allyl alcohol, ketones, ethyl acetate, and ethyl formate. This process was generally accomplished through fractional distillation, where substances are removed from the mixture by increasing the temperature incrementally until each substance, with a different boiling point, volatilizes from the mixture. However, the production of ethyl acetate and ethyl formate was through a direct chemical reaction of acetic acid distilled from the pyroligneous acid with ethanol and sulfuric acid.

Most of the waste produced through these various processes was utilized. Charcoal, non-condensable gas, distilled wood tars, creosote oil, sawdust and shaving by-products were returned to the powerhouse to be burned for fuel. Waste material that could not be recycled or transformed into usable products, primarily wastewater, was conveyed and deposited in two connected waste lagoons (the former NE and SW pits) located west of the FPS.

The facility produced approximately 400 tons of scrap wood each day. From each ton of scrap wood, 600 pounds of charcoal, 5,000 cubic feet of non-condensable gas, 22 gallons of pitch (wood tar), and 111 gallons of pyroligneous acid were generated as by-products. A daily estimate made in 1924 shows that the chemical plant was producing approximately 210,000 pounds of charcoal, 25,000 pounds of pitch (wood tar), 1,200

gallons of both light and heavy oils, 2,100 gallons of methyl alcohol and methyl acetone, and 2,100,000 cubic feet of fuel gas (Cummings, 1978).

By December 1941, most of the production of automobiles was suspended due to World War II. In 1942, the body plants were converted to produce wooden gliders for the government. The bulk of the glider fabrication was done in Building Three. Building Two was used for assembly of shipping crates, and Building One was used to prepare and paint the glider fabric, and to complete final assembly. The plant layout during the 1940s is shown on Figure 2-4. Following the war, wooden automobile body production resumed at the FPS.

In December 1951, Kingsford Chemical Company purchased the FPS and continued the woodworking activities, wood product distillation, and charcoal production until 1957, when it became Kingsford Company and continued operations until 1961. Thereafter, Kingsford Company discontinued its production activities and leased the three body plant buildings to other industries.

Initial tenants included the Aluminum Specialty Company that manufactured projectiles for 105 millimeter artillery shells in the former location of Building Three; and the Prefex Corporation of Milwaukee (later General Controls) that manufactured automatic temperature controls for aviation use and aircraft instruments for the Armed Forces in the former location of the body plant. Kingsford Company used part of Building Two for storage and leased the remainder to Fontana Aviation who refurbished aircraft for the U.S. Air Force.

Subsequent to the discontinuance of the Kingsford Company operations in 1961, Lodal, Inc. purchased the major remaining portions of the land (240 acres) and buildings that were formerly the Ford-Kingsford Product Facility operations. Lodal, Inc. manufactures garbage handling truck units, truck loaders, and equipment for handling containerized garbage.

2.9.3 Historical Industrial Activities in Kingsford

Kingsford has historically been, and continues to be, home to several major industries. The Citizens Gas Company, a MGP previously owned by the Iron Mountain Light & Fuel Company and subsequently owned by Iron Mountain Gas Company (IMGC), operated a plant on River Avenue. A new plant was built near Carpenter Avenue which replaced the old plant and included a tar pit located behind the plant. This plant consumed 1.5 tons of coal per day and 2 tons of coke. In 1947, IMGC erected a

propane gas bottling plant near its gas manufacturing plant and was asked to fence the sludge pool at its plant on the east end of Hamilton Avenue.

Other major industries in the area prior to 1961 included Grede Foundries (established in 1947 and still in operation), which was located east of the FPS on Carpenter Avenue. Grede produced molten iron for castings that were machined in the adjoining facilities of Lake Shore Engineering. Prior to 1946, Lake Shore Engineering was located on South Stephenson Avenue in Kingsford. After Kingsford Company discontinued operation, Grede Foundries purchased the former body plant Building Three. Lake Shore Engineering moved its facilities to this location and Grede expanded its Carpenter Avenue facilities. Grede Foundries disposed of waste from its operations in retention ponds and at least two gravel pits north of its Carpenter Avenue plant. The gravel pits were located on the northeast and southeast side of the Iron Mountain Cemetery Park. MDEQ required Grede to close both of these unpermitted landfills.

In addition to the industries mentioned above, many other businesses have operated in and around the FPS subsequent to the cessation of the Ford-Kingsford Product Facility operations including, among others, Colonial Broach and Manufacturing, Custom Metal Fabricators, Inc., Delta-Do-It Center, Dickinson Homes, Foley-Martens, Frank Smith Castings, Hancock Wood Products, Jacklin Steel Supply Inc., Kingsford Broach & Tool, Klatzky Brothers, Smeester Bros. Trucking, Super Tool and Engineering, Wittock Supply, Wisconsin Michigan Power Company, and Zam's Auto Shop. In addition, the Nelson Paint Company has had operations in Kingsford from 1955 to present, and a major scrap metal business began operations in 1959 and continues operations in the area.

2.10 Previous Investigations

A number of investigations have been completed to determine the source, nature and extent of chemical constituents in the AOC. A list of previous investigations and removal actions are presented below. Titles of the specific investigation documents are included in Section 9.0.

- Investigations were completed by EWA, on behalf of Ford between 1986 and 1987 (EWA, 1986; 1987). These investigations culminated in the removal of wood tar material from the NE Pit area between November 30, 1987 and March 2, 1988. A total of approximately 27,000 cubic yards of material was removed and transported off site for disposal (EWA, 1988).

- Three drums labeled "carbide barrel" were removed from the RDA by the City of Kingsford in August 1988 following an inspection of the area by the MDEQ in May 1987.

- A Site Assessment Fund Investigation was completed in June 1996 by BLDI on a parcel of land that encompasses a small portion of the NE Pit. The investigation included soil borings, groundwater monitoring wells, soil samples, and groundwater samples (BLDI, 1996).

- A Multi-Agency Advisory Group (MAAG) conducted a study to determine the origin of dissolved-phase methane in groundwater in the Kingsford, Michigan area. U.S. EPA's Emergency Response Group was the lead agency in MAAG and other members included: USGS, MDEQ, Michigan Public Service Commission, City of Kingsford, Michigan State University, and Michigan Technological University (Westjohn, et. al. 1996). Activities undertaken by U.S. EPA's Emergency Response Group include:

  - Collection of soil and groundwater samples from existing monitoring wells, monitoring wells installed by the USGS, and temporary monitoring wells installed by MDEQ. Work performed as part of the investigations also included surface and borehole geophysical surveys, and shallow and deep soil vapor surveys (Westjohn, et. al. 1996).

- Approximately 35 cubic yards of wood tar was removed from the surface of the NE Pit during November 1997 and subsequently transported off site for disposal.

- An EE/CA was performed by ARCADIS on behalf of Ford and KPC. Work performed as part of the EE/CA included installation of monitoring wells, collection of soil and groundwater samples, installation and monitoring of vapor monitoring points, performance of geophysical surveys, and evaluation of Site geology and hydrogeology (ARCADIS Geraghty & Miller, 1998).

- Remediation Investigation (RI) work has been performed by ARCADIS on behalf of Ford and KPC and has been on-going since 1998. Work performed as part of the RI included installation of soil borings, monitoring wells, and test pits; collection of soil, groundwater, surface water, and sediment samples; installation and monitoring of vapor monitoring points; installation and operation of soil vapor extraction systems; conducting geophysical surveys and a bioassessment of the Menominee River; installation and operation of pilot groundwater extraction systems; and continued evaluation of Site geology and hydrogeology. A draft of

the RI Report was submitted to the MDEQ on June 30, 2002 (ARCADIS, 2002b).

- IRAPs have been prepared and implemented by ARCADIS for the RDA, NE Pit, SW Pit, FPS and the overall methane conditions (ARCADIS, 2002d; 2003a; 2003b; 2007). This work has provided information relevant to the RI characterization.

3. Investigation Activities

This section presents the general RI approach and an overview of the work that has been completed to define the nature and extent of impacted groundwater within the AOC. The section also provides documentation of investigation activities that have been completed since January 2001, the date through which previous data was included in the June 2002 RI Report.

3.1 General Investigative Approach

As indicated in Section 2.10, investigation activities initially focused on specific areas within the AOC, such as the NE Pit. Data collection points (e.g., soil borings, monitoring wells, etc.) from the various investigations, supplemented by the installation of additional data collection points, were then used to assess subsurface conditions on an area-wide basis. The locations where investigation activities were completed through December 2006 during the EE/CA, RI, and IRAPs are provided in the base map shown on Figure 2-1.

The investigative approach for the supplemental RI activities completed since January 2001 included completion of soil borings, installation of monitoring wells, installation of soil vapor probes, collection of soil and groundwater samples for laboratory testing, performance of short-term aquifer tests, performance of soil vapor extraction tests, and completion of test pit excavations. This work was conducted to obtain additional information on some of the areas within the AOC, improve the conceptual model for the AOC, and continue to obtain data on area-wide subsurface conditions.

Details regarding the specific investigative methods used in the AOC are provided in several Quality Assurance and Project Plans (QAPP) which have been updated throughout the investigation. The most recent QAPP was submitted to MDEQ on November 22, 2004 (ARCADIS, 2004c), in accordance with Paragraph 7.3 of the Consent Judgment.

3.2 Site-Wide Investigation Activities

From spring 1997 through December 2006, the following data collection points have been installed to better define the hydrogeologic setting and the distribution of constituents at the Site:

- Approximately 260 soil borings

- Approximately 230 monitoring wells and piezometers
- Approximately 60 extraction wells
- Approximately 500 soil vapor probes
- Approximately 55 test pits

These investigative points are summarized in Table 3-1.

Data collected from these investigation points was used to develop a comprehensive understanding of the groundwater flow system and distribution of constituents in the groundwater within the AOC. Groundwater conditions within the AOC were evaluated using applicable Part 201 criteria. Response action objectives were then established, and interim response actions were developed and implemented to appropriately address groundwater within the AOC.

4. Investigation Results and Comparison to Part 201 Criteria

Sections 2.3 and 2.4 provided general information pertaining to regional geologic and hydrogeologic conditions. Data from the investigation activities summarized in Section 3 were used to develop a conceptual model of site-specific geologic and hydrogeologic conditions and the distribution of constituents in the groundwater within the AOC. The following sections present details regarding the conceptual site model.

4.1 Site-Wide Physical Characteristics

The investigation activities within the AOC have provided a good understanding of the geology and hydrogeology beneath the City of Kingsford and the relevant portion of Breitung Township. This understanding of the geology and hydrogeology, along with the distribution of constituents in the groundwater, was used to define the AOC.

Subsurface geologic material beneath the AOC consists of complex successions of unconsolidated sediments that overlie bedrock. The unconsolidated deposits encountered in the majority of the drilled locations consisted of successions of clay, silt, sand and gravel that are subsequently overlain by a coarser layer of gravel and fine-grain to coarse-grain sand. The physical characteristics of the sediments provide insight into the environmental conditions under which they were deposited. However, because of the complex nature of the deposits, correlation of units between borings is sometimes difficult.

To better understand the geologic units, their distribution, and interrelationship with hydrology, a three dimensional (3-D) geologic model of the AOC was developed. The geologic units and successions identified and described in hundreds of shallow and deep boreholes throughout the AOC were used as the basis for the geologic model. In addition to the borehole data, seismic reflection data was used to determine the configuration of the bedrock surface. The details and methodology of the geologic model are described in Section 5.17 of the RI Report (ARCADIS, 2002b).

Up to 13 different lithologic units, ranging from gravel to sand to clay, were characterized in each of the boreholes along with the thickness of each unit. These units were then grouped into three composite units that represent depositional environments and hydrogeologic units. The three composite units have been designated as Units 1, 2, and 3. The lithologies included in Unit 1 are gravel and fine-grain to coarse-grain sand, which are representative of geologic materials with the highest porosity and permeability. Unit 2 lithologies include very fine-grain sand and

silty sand, and Unit 3 lithologies include silt and clay. The geologic materials in Units 2 and 3 have a lower porosity and permeability than the Unit 1 material.

One of the purposes of the 3-D geologic model was to characterize the three units based on grain size and its relationship to permeability to better understand the flow of groundwater across the AOC. The three units were determined to be representative of glaciolacustrine and glaciofluvial depositional environments. A glaciolacustrine deposit or unit tends to be silt and clay rich and therefore is a less permeable matrix, whereas a glaciofluvial deposit or unit tends to be more sand and gravel rich and is therefore a more permeable matrix.

A unit can thin, thicken, disappear, reappear, and be very complex and unordered, which is dependent on the environmental conditions during deposition and formation of the unit. Different types of deposition may have also occurred during the same time over an area, resulting in a very heterogeneous association of units with one another, creating complex pathways of permeable material associated with preferential groundwater flow.

The 3-D geologic model provided a means to visualize the clay, silt, and sand/gravel units from various directions, which aided in interpreting unit distribution, geologic barriers, and pathways for groundwater flow. The sand/gravel rich units (Unit 1 material) are the most permeable zones and therefore act as a preferential pathway for groundwater flow. The silt and clay units (Unit 2 and 3 materials) are less permeable zones that act as barriers (or resistance) to groundwater flow.

4.1.1 Site-Specific Geology

The types of unconsolidated deposits encountered within the AOC represent different depositional environments. The lowest unconsolidated deposit is most commonly layers of clay and silt that overlie bedrock. These materials are interpreted as being deposited in a glaciolacustrine environment. This depositional environment is generally characterized by materials seen in Units 2 and 3. However, some layers of sand and gravel are also present, representing Unit 1 material in the deposit. These coarser-grain materials represent periods of intermixed glaciofluvial deposition further intermixed with a glaciolacustrine deposit.

Overlying the glaciolacustrine deposit are layers of fine-grain to coarse-grain sand and gravel that are representative of glaciofluvial depositional conditions. A glaciofluvial deposit is almost always representative of Unit 1 material. Sands located adjacent to

the Menominee River are representative of an alluvial depositional environment, from the historic pathways of the Menominee River. An alluvial deposit is also representative of Unit 1 material.

At some locations within the area, a dense clay till overlies the bedrock surface. Referred to as the "Lodgement Till", this till was deposited by plastering-on beneath a glacier and is characteristic of Unit 3 material.

Bedrock samples recovered from numerous boreholes were described as a metamorphosed gray, slightly fissile slate, with the exception of the bedrock encountered in Monitoring Wells GM-2B and GM-8 that was identified as a metabasic igneous rock. The slate bedrock unit is locally known as the Michigamme Slate of Middle Precambrian age. The bedrock material observed in outcrops and recovered from boreholes is very dense.

The paleo-surface of the bedrock delineated during the investigation activities is shown on Figure 4-1. Exposed bedrock (outcrop) is present along the side of Highway M-95 in Michigan adjacent to the Menominee River, to the south of the Ford Airport and approximately 700 feet north of the Menominee River, and to the east of the intersection of Riverview Drive and Beech Street (along the south side of Riverview Drive). Bedrock is also exposed on the Wisconsin side of the Menominee River. Unconsolidated deposits cover the bedrock surface throughout the remainder of the AOC. The maximum observed depth to bedrock within the AOC (363 feet below land surface) was observed at Boring GMSB-2 (SW Pit), which corresponds to the lowest bedrock elevation of 754 ft msl. The highest bedrock elevation within the AOC (1,135 ft msl) is located at the bedrock outcrop south of the Ford Airport.

Review of the bedrock elevation data indicate that the bedrock surface within the AOC forms a roughly elliptical basin or trough which trends west-east in a band centered under Lodal Park (Figure 4-1). A mound in the bedrock surface is present within the basin at the location of Monitoring Well GM-33. The north side of the basin is characterized by a steep upward slope to the north with an average rise of 200 feet over a distance of approximately 1,500 feet. The bedrock in the southeastern portion of the basin has an equally steep upward slope to the southeast. The steep faces of the bedrock basin play an important role in directing the flow of groundwater and any contained constituents.

The Lodgement Till overlies the bedrock at various locations throughout the AOC. The till (Unit 3 material) is an extremely dense, compacted, and poorly sorted silty clay with varying amounts of sand, gravel, and weathered bedrock fragments that range from dark reddish brown to dark bluish gray. The variable distribution of the till is the result

of glacial erosion of the paleo-surface. Where present, the till ranges in thickness from a few feet to approximately 20 feet.

A succession of glaciolacustrine silts, clay, sands and gravels overlie the bedrock, or Lodgement Till, within the AOC. These deposits have been characterized and placed into three composite units representing gravel to fine sand, very fine sand and sandy silt, and silt and clay. The bedrock represents the basal boundary of the deposit. Boreholes drilled during the investigation revealed that silt and a smaller number of clay layers, generally reddish brown, and lenses of sand and gravel present in lesser quantities, dominate the deposit. The glaciolacustrine deposit is thickest in the central portion of the AOC around Lodal Park, which corresponds to the deepest area of the bedrock basin.

The silt occurs over a wide area and appears to be derived from weathered rock that originated on the Canadian Shield and was deposited in a glacial moraine-dammed lake, under low-energy conditions. The thin layers of red clay, which are frequently interbedded with the silt, were also deposited over a wide area, under low-energy conditions. However, the clay is compositionally different from the silt. Field testing with hydrochloric acid during the investigation indicated that the red clay contained abundant calcium carbonate, a constituent that was not observed in the coarser deposits. Despite their wide distribution, the layers of silt and clay do not always correlate well, either vertically or horizontally. Silt and clay deposited during a period of time could be eroded during subsequent more energetic depositional events that could have scoured a lakebed, resulting in discontinuities in the silt and clay layers (Unit 3 material) and creating preferred groundwater flow pathways between different discontinuous sand units (Unit 1 material).

Examination of the sand and gravel encountered lower within the glaciolacustrine succession indicates that, like the silt, they are derived from glacially eroded igneous and metamorphic rocks of the Canadian Shield. The deposits are suggestive of energetic depositional conditions that could occur during high discharge glacial melting events. The higher-energy deposits tend to have a smaller lateral distribution (less sheet-like lateral continuity) than finer-grain units, since more energy is required to transport them.

The sand and gravel within the glaciolacustrine deposit are most commonly associated with the bedrock interface and edges of the bedrock basin. However, certain sand zones appear more extensive within the glaciolacustrine deposit. For example, a sand unit deposited on the western side of the AOC along the east bank of the Menominee River exhibits a high degree of lateral continuity. This north-south trending sand layer, which disappears to the east, maintains a thickness of approximately 25 feet at an

elevation of approximately 1,040 ft msl. This sand layer is shown in geologic cross sections, which are at the locations indicated on Figure 4-2 and are shown on Figures 4-3 and 4-4. This sand has been found to serve locally as a pathway and reservoir for the accumulation of impacted groundwater.

Overlying the deposit of glaciolacustrine clay and silt, with sand and gravel, is the glaciofluvial deposit dominated by fine-grain to coarse-grain sand and gravel (Unit 1 material), which is generally yellowish brown to brown. Finer-grain layers are less common, but not completely absent, within this deposit. The presence of sand and gravel, and their distribution in this upper unit, suggest that the deposit was formed under higher-energy glaciofluvial conditions. Such conditions could occur during an event such as a breach in a moraine dam or glacial outwash. Potential moraine dams are present to the north and south of the AOC. Under a higher-energy condition, such as a breach in a moraine dam, glaciofluvial type units like sand and gravel would have been deposited as a sheet over a large area.

Depositional conditions appear to have been particularly energetic on the eastern side of the AOC near the historic Sewer Creek (Figure 2-1), where borehole logs from the investigation activities indicate that sand and gravel units are coarser and thicker. In addition, review of a 1936 aerial photograph show that numerous lineaments are apparent in the eastern portion of the AOC near Monitoring Wells UG-4, UG-5, and GM-15, and the historic Sewer Creek, indicative of very energetic braided fluvial systems in the shallow deposits. The glaciofluvial deposit ranges up to 70 feet in thickness, although is sometimes absent.

The depositional model for the upper sand and gravel is consistent with the flat topography over much of the northern part of the AOC, which corresponds to the Upper Terrace. Glacial kettles (such as the NE Pit and SW Pit) are present and attributed to stagnant ice, which was deposited prior to and concurrently with the glaciofluvial deposits. When the ice was deposited, layers of sand and gravel surrounded the ice and eventually covered it. Over time, the ice melted, producing the glacial kettles. The bottom of the kettles occasionally contain thin layers of very poorly sorted mixtures of clay, silt, and sand that were contained in the ice prior to melting, but were subsequently compacted to form a layer after the ice melted.

The most recent geologic deposit within the AOC is alluvial material that occurs along the banks of the Menominee River. Subsequent to the deposition of the glaciolacustrine and glaciofluvial deposits, the Menominee River flowed to the south of the AOC. The river eroded the glacial materials and cut the River Terrace adjacent to the Menominee River, and deposited coarse alluvial material (Unit 1). Glaciolacustrine

and glaciofluvial deposits, which may have been previously present in the area, have likely been eroded by the Menominee River.

4.1.2 Site-Specific Hydrogeology

The hydrogeology within the AOC is controlled by the glacial sediments and bedrock topography. The AOC is located within a bedrock basin where the glacial sediments are locally thickest within the central portion of the AOC. Site investigation activities have identified four discrete water-bearing zones within the unconsolidated glacial sediments adjacent to and immediately east of the Menominee River. From top to bottom these units are referred to as the Zone A, B, C, and D Sands. These primary water-bearing units are generally separated from each other by aquitards that consist of silts, clays, and very fine-grained sands. In places, the Zone B, C, and/or D Sands may be in direct hydraulic connection with each other. A north-south geologic cross section shown on Figure 4-3 was prepared parallel to the Menominee River in the area where groundwater constituent concentrations are above the generic chronic GSI criteria (not adjusted for the mixing zone). The location of the cross section is included on Figure 4-2. The geologic cross section shows the Zone A, B, C, and D Sands as they occur along the east side of the Menominee River. The following observations can be made from the cross section shown on Figure 4-3:

- Zone A Sands are continuous and extensively developed adjacent to the east side of the Menominee River, with some variation in thickness.

- Zone B Sands were initially interpreted to be a fairly continuous sand zone that was hydraulically separated from the underlying Zone C Sands. The Zone B Sands have subsequently been determined to be present as an isolated lense in the vicinity of Monitoring Well GM-25B, and are better interpreted as an extension of the Zone C Sands and are hydraulically connected to them. The Zone B Sands designation has been retained for the sands in the vicinity of the interval screened in Monitoring Well GM-25B.

- Zone C Sands are fairly continuous and extensively developed adjacent to the east side of the Menominee River, but are more variable in grain size and interbedded with silt layers than originally interpreted. The Zone C Sands are truncated in two places by bedrock highs and thin out toward the north due to the shallow depth of bedrock. The continuity and quality of the Zone C Sands are poorer to the north of the bedrock high at Soil Boring GMSB-118 than to the south of this location.

- Zone D Sands are localized and present only in bedrock lows, where the depth to bedrock is the greatest.

Two east-west geologic cross sections, shown on Figures 4-4 and 4-5, have been prepared perpendicular to the Menominee River to provide an understanding of the occurrence of the sand zones further east of the Menominee River. Figure 4-2 shows the locations of these cross sections. The geologic cross section shown on Figure 4-4 depicts the geology between Extraction Well GMEWC-2 and Soil Boring GMSB-1, which was drilled through the NE Pit. This geologic cross section indicates that the Zone A and C Sands are not continuous in a west to east direction, with a bedrock high appearing to influence the continuity of the Zone C Sands.

The geologic cross section shown on Figure 4-5 depicts the geology between Monitoring Well GM-10 located on the west side of the Menominee River and Soil Boring GMSB-2, which was drilled through the Southwest Pit. In this cross section, the Zone A Sands again appear to be discontinuous in a west to east direction, and the Zone C Sands are not developed east of Monitoring Well GM-82A/B, with the possible exception of several thin sand lenses in Monitoring Well GM-37B.

A second north-south geologic cross section was also prepared inland of the Menominee River and is shown on Figure 4-6. The location of this geologic cross section is also shown on Figure 4-2. This geologic cross section shows that the Zone A Sands are intermittent north of Monitoring Well GM-33, which is the area where groundwater is migrating from beneath the NE Pit and venting to the Menominee River. This geologic cross section shows a rapid rise in the bedrock to a high at Soil Boring GMSB-19, where the bedrock was encountered at approximately 60 ft bls. This bedrock high, which is continuous along the northern side of the AOC, helps channel the east to west migration of groundwater from the NE Pit to the Menominee River.

Groundwater flowing through the unconsolidated deposits throughout the AOC ultimately migrates to the Menominee River. The shallow and deep groundwater system flow patterns based on measurements obtained in November 2006 are shown in the groundwater potentiometric surface maps on Figures 4-7 and 4-8. Additional groundwater potentiometric surface maps based on groundwater data collected through December 2003 were presented in the mixing zone application submitted to the MDEQ on November 23, 2004 and resubmitted on March 31, 2005. The groundwater level data from June 2000 through November 2006 displays an almost identical groundwater flow pattern to that shown on Figures 4-7 and 4-8, indicating little long-term change in the groundwater flow gradients and directions.

4.1.2.1 Zone A Sands

The thickness of the Zone A Sands range from approximately 30 feet along the east side to approximately 50 feet farther inland of the Menominee River. The Zone A Sands are commonly encountered between approximately 1,010 and 1,080 ft msl and consist primarily of medium to coarse sand with gravel. Based on the elevation of the top of the Zone A Sands and the depth of the Menominee River, it appears that there are areas where the Menominee River channel might incise into the uppermost water bearing unit.

Hydraulic testing was completed on Extraction Wells GMEW-1, GMEW-2, GMEW-5, and GMEW-6 to determine the hydraulic properties of the Zone A Sands. The locations of these extraction wells are shown on Figure 4-9 and the pumping test results are summarized in Table 4-1. Based on the hydraulic testing, the transmissivity of the Zone A Sands in the area surrounding these extraction wells was determined to range from approximately 800 to 4,700 square feet per day (ft^2/day).

Additional data on the hydraulic properties of the Zone A Sands were determined during the extraction well hydraulic testing program and are discussed in Section 3.3 of the report entitled Performance Monitoring Plan - Groundwater Extraction System, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case No. 04-1427-CE, April 22, 2005. Short-term pumping tests were performed to determine the specific capacity of each of 31 extraction wells installed into the Zone A Sands (Figure 4-9). The specific capacities for the Zone A Sands, determined after development of the wells had been completed, ranged from 1.0 to 27.8 gallons per minute per foot (gpm/ft), as summarized in Table 4-2. In addition to providing hydrogeologic data for the conceptual site model, the specific capacity data were used to determine the effectiveness of individual wells, determine pump size for each extraction well, confirm the validity of the hydraulic properties assigned to the Zone A Sands for groundwater flow modeling, and to assist in the design of the performance monitoring program.

4.1.2.2 Regional Aquitard

Within the AOC, a regional aquitard consisting primarily of very fine-grain silty sand and silt with interbedded clay lenses exists between the Zone A and Zone B/C/D Sands at a depth of approximately 60 ft bls, although it is shallower along the Menominee River within the Riverside Terrace. Variable gradations between silt and very fine-grain silty sand can be common. Where the aquitard consists primarily of silt and clay there is poor hydraulic communication between the Zone A Sands and the underlying Zone B and C Sands. Higher percentages of sand in the aquitard allow for better hydraulic communication between the sand units. Data collected during the drilling of Monitoring

Well GM-10 suggest that on the west side and beneath at least a portion of the Menominee River the occurrence of fine-grain sand rather than silt or clay allows for greater vertical hydraulic communication (Figure 4-5).

Hydraulic testing completed on the Zone B and C Sands resulted in a range of estimated leakance (vertical hydraulic conductivity/layer thickness) for the aquitard between 2.9×10^{-2} and 4.9×10^{-3} per day, which was presented in the report entitled Numerical Groundwater Flow Model, Kingsford, Michigan, dated May 2004 (ARCADIS, 2004d).

4.1.2.3 Zone B Sands

The Zone B Sands have been determined to be an isolated sand lense contained within the aquitard immediately above the Zone C Sands at the location of Monitoring Well GM-25B. The Zone B Sands designation has been retained for the sands in this interval but at locations farther to the south they have been combined with the Zone C Sands. The Zone B Sands have been observed between approximately 940 and 960 ft msl and are approximately 13 feet thick at Monitoring Well GM-25B. Following the installation of Monitoring Well GM-25B, additional investigation was conducted on the Zone B Sands in this area with the following findings:

- Extraction Well GMEW-4 was installed 20 feet north of Monitoring Well GM-25B. Following initial groundwater extraction during the pilot testing, the well collapsed after producing a large volume of silt and fine-grain sand significant enough to form a pocket around the well screen.

- Extraction Well GMEWC-9 was installed 60 feet north of Monitoring Well GM-25B; however, the Zone B Sands at this location were only 1 foot thick and the well was completed in the top of the Zone C Sands.

- Extraction Well GMEW-4R was installed approximately 20 feet south of Monitoring Well GM-25B. The Zone B Sands at this location were approximately 5 feet thick, although thickness was difficult to determine due to the collapse of Extraction Well GMEW-4. Extraction Well GMEW-4R is completed in both the Zone B and C Sands and is a very poor producer with a specific capacity of 0.12 gpm/ft (perhaps also due to the same reasons that caused the collapse of Extraction Well GMEW-4).

- Extraction Well GMEWC-6 was installed 30 feet south of Monitoring Well GM-25B. The Zone B Sands were 12-feet thick at this location. Extraction Well GMEWC-6 was screened in both the Zone B and C Sands.

- Extraction Well GMEWB-1 was installed 90 feet south of Monitoring Well GM-25B; however, no soil samples were recovered in the interval from 96 to 110 ft bls during the drilling. Nevertheless, the borehole was completed as an intended extraction well where the Zone B Sands would have been encountered, if present. The abundance of silt and very fine-grain sand produced during development and the very poor groundwater yield during the short-term pumping test (less than 0.1 gpm/ft) indicates that the Zone B Sands are either not present or are very limited in thickness at this location.

- Soil Boring GMSB-133 was drilled 120 feet south of Monitoring Well GM-25B. The Zone B Sands found at this location were only 2-feet thick.

- Soil Boring GMSG-137 was drilled 40 feet east of Monitoring Well GM-25B. Zone B Sands were not encountered at this location.

Hydraulic testing was completed on Extraction Wells GMEW-4 and GMEW-4R to determine the hydraulic properties of the Zone B Sands. The locations of these extraction wells are shown on Figure 4-9 and the pumping test results are summarized in Table 4-1. Based on the hydraulic testing, the transmissivity for the Zone B Sands surrounding these extraction wells was determined to range from approximately 100 to 250 ft^2/day.

4.1.2.4 Zone C and D Sands

The Zone C Sands are generally laterally extensive as a sand unit with a thickness ranging from approximately 40 to 80 feet; however, the morphologic characteristics vary from homogeneous coarse-grain sands to interbedded variable-grain sands with gravel and silt lenses. Along the Menominee River, the Zone C Sands are located immediately above a basal silt unit overlying bedrock, except where the Zone D Sands are present. The Zone D Sands have been encountered overlying Lodgement Till or bedrock along the Menominee River, beneath a relatively thin silt/clay unit that underlies the Zone C Sands. The morphology and lithology of the Zone D Sands are similar to the Zone C Sands, but are treated as a separate water-bearing unit since prior groundwater sampling of these sands adjacent to the Menominee River has not resulted in detection of Site constituents. The Zone C Sands are encountered between

approximately 860 and 940 ft msl. Where present adjacent to the Menominee River, the Zone D Sands have been encountered at approximately 840 to 860 ft msl.

Hydraulic testing was completed on Extraction Wells GMEW-3, GMEW-7, GMEW-8, and GMEW-9 (Extraction Well GMEW-9 has subsequently been incorporated into the groundwater extraction system and re-designated as Extraction Well GMEWC-4) which are screened in the Zone C Sands. The locations of these extraction wells are shown on Figure 4-9 and the pumping test results are summarized in Table 4-1. Based on the hydraulic testing, the transmissivity of the Zone C Sands in the area surrounding these extraction wells was determined to range from approximately 1,600 to 3,100 ft^2/day.

Additional data on the hydraulic properties of the Zone C Sands were determined during an extraction well study program. The specific capacities for the Zone C Sands, determined after development of the extraction wells had been completed, ranged from 0.3 to 7.4 gpm/ft, as summarized in Table 4-2. The three extraction wells with the lowest specific capacities (0.3 gpm/ft) include Extraction Wells GMEWC-6, GMEWC-9, and GMEWC-10. Extraction Wells GMEWC-9 and GMEWC-10 are additional Zone C extraction locations that were incorporated into the current groundwater extraction system based on the results of the pumping tests on Extraction Well GMEWC-6.

Since the results of the RI have indicated that groundwater in the Zone D Sands does not contain constituent concentrations above the generic chronic and acute GSI criteria, no pumping tests have been performed on the Zone D Sands.

4.1.3 Menominee River

The Menominee River is the groundwater migration boundary for the AOC. Groundwater within the AOC migrates from hydraulically upgradient areas towards the river since the hydraulic pressure of the groundwater is higher than that of the surface water in the river. In one of the low lying areas adjacent to the Menominee River, several groundwater seeps, or springs, are present, where the groundwater first rises to the ground surface before entering the river. The old Ford Dam and the Big Quinnesec Dam regulate the surface water level in the river and the river flow rate.

An evaluation was performed to delineate preferential pathways through which the majority of groundwater adjacent to the river would flow, prior to migrating into the river. As discussed in Section 4.1, preferential groundwater pathways are comprised of the more permeable Unit 1 materials within the AOC. To determine the distribution of these preferential pathways on the east side of, and adjacent to the Menominee River,

a geologic cross section was prepared. The location of the cross section is shown on Figure 4-2, and the cross section is shown on Figure 4-3.

Results of hydraulic testing performed on monitoring wells throughout the AOC were used to determine which geologic strata would likely comprise the preferential pathways. The preferential pathways for groundwater flow in the AOC are the fine-grain to coarse-grain sand and gravel referred to as Unit 1 materials. Little groundwater flow occurs through the clay, silt, silty sand, and very fine-grain sand, referred to as Unit 2 and 3 materials.

The preferential groundwater pathways (Unit 1) delineated along the Menominee River range from shallow to deep within the groundwater system and have been designated as the Zone A, B, C, and D Sands, respectively. The geologic cross section that shows the distribution of these sands is presented on Figure 4-3. Groundwater from upgradient in the AOC flows preferentially through these zones of sand and into the Menominee River.

4.2 Site-Wide Groundwater Characteristics

Groundwater characteristics throughout the AOC have been evaluated through the collection of groundwater samples by ARCADIS from approximately 160 monitoring wells and five residential water supply wells. In addition to groundwater samples collected from monitoring wells, grab samples of groundwater were collected from several of the soil borings at selected intervals and from several locations within the groundwater seep area described above.

Table 4-3 presents a summary of samples that have been collected from groundwater in the AOC and the associated analytical parameters used to characterize groundwater conditions. In summary, four site-wide rounds of groundwater samples, from a variable list of monitoring wells, have been collected since 1996. Additional sampling of select individual monitoring wells has also been conducted. In total, the groundwater data set for the AOC is comprised of over 660 groundwater samples. The groundwater samples evaluated include samples collected throughout the AOC, including along the river and in the residential and potential source areas. The following sections present a summary of how the data was utilized to evaluate the distribution of the groundwater plume and to evaluate overall groundwater quality. The locations of the monitoring wells where the groundwater samples were collected are shown on Figure 2-1.

The list of analytical parameters for the groundwater and associated analytical methods is included in Table 4-4. However, this list of parameters does not necessarily coincide for every groundwater sample due to the variation in the constituent list between the initial EE/CA investigation and subsequent RI investigation. The constituent list was specified by the governing regulatory agencies at the time of the sampling events.

4.2.1 Plume Distribution

In most locations, constituents that are above background and those that are above the generic criteria are restricted to discrete units within the glacial deposits. Variations in the constituent concentrations are controlled by the nature of the geologic units, which affect groundwater movement and constituent distribution.

To gain a better understanding of the distribution and movement of the chemical constituents in the groundwater system, a 3-D visualization model was developed based on the 3-D geological model discussed in Section 4.1 of the RI Report (ARCADIS, 2002b) for the Site.

The data for several volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) that are representative of "signature" constituents (based on the historic source areas) and total organic carbon (TOC) were entered into the 3-D visualization model. 2,4-dimethylphenol was selected to represent the distribution of the "signature" VOC and SVOC concentrations in the groundwater. As 2,4-dimethylphenol is a constituent that degrades slowly under the anaerobic conditions found in the majority of the groundwater system, its distribution is expected to be more widespread and is expected to be present at higher concentrations in hydraulically downgradient areas than other more anaerobically degradable VOC and SVOC constituents. TOC was also selected to represent the distribution of the "signature" VOC and SVOC constituents in the groundwater because it is an indicator parameter of organic mass and can be used to measure the portion of the substrate that could biodegrade to form methane.

The 3-D chemical models aid in understanding the chemical distribution within the groundwater system and define areas of detectable chemical concentration. The representative chemical concentration value at a given data collection point (e.g., well location) used in the model was generally the highest value of that chemical concentration measured at that data collection point.

The 3-D chemical models were constructed with groundwater data collected prior to 2002. However, results of groundwater data collected since 2002 has been compared to the distribution using the visualization model, and confirm the extent and distribution of groundwater constituents identified by the 3-D visualization model for the chemical constituents. Thus, the visualization prepared using pre-2002 data is adequately representative of current conditions.

4.2.1.1 2,4-Dimethylphenol

The 2,4-dimethylphenol plume distribution shown in the models indicate that this constituent is generally distributed in the central and western portions of the AOC, at depths below 1,000 ft msl. At this elevation, the deep portions of the bedrock basin are generally characterized by the Zone B/C Sands.

Locations where 2,4-dimethylphenol is present above 1,000 ft msl (generally Zone A Sands) include an area in the vicinity of the NE Pit and an area near the east bank of the Menominee River generally between Monitoring Wells GM-25 and GM-27. The highest concentrations of 2,4-dimethylphenol are present at depth in the central portion of the Site where the elevation of the bedrock is lowest and at Monitoring Well GM-25B near the Menominee River. The highest concentrations of 2,4-dimethylphenol at shallow elevations are present for the most part between Monitoring Wells GM-25A and GM-27A near the Menominee River. The upward vertical component of the hydraulic gradient of the groundwater system along the Menominee River results in the upward migration of 2,4-dimethylphenol to shallower elevations.

The distribution of the other individual VOCs and SVOCs are similar to or smaller than that for 2,4-dimethylphenol and were found to be located within the extent of the 2,4-dimethylphenol plume. Figures illustrating the plume distribution models for 2,4-dimethylphenol and other "signature" VOCs and SVOCs are included in Appendix I of the RI report (ARCADIS, 2002b).

4.2.1.2 TOC

The concentration of TOC includes all of the organic constituents in the groundwater and represents a source for potential methane generation. Therefore, a 3-D plume distribution model of TOC in groundwater was constructed to evaluate the extent and mass of constituents present within the subsurface. The detected groundwater concentrations of TOC are included in Table 4-5. The 3-D plume distribution model for TOC is included in Appendix I of the RI Report (ARCADIS, 2002b).

A review of the TOC distribution shows that the majority of the TOC in the groundwater in the AOC occurs in the deeper portion of the groundwater system (Zone B/C) in the vicinity of Soil Boring GMSB-2 and Monitoring Wells GM-37A/B and GM-62-B/C. Elevated TOC concentrations exist within the Zone B/C Sands and are located in the vicinity of, and hydraulically downgradient from, the former NE Pit. However, the highest TOC concentration is present at Monitoring Well GM-32, which likely represents a stagnant zone where dissolved organics in groundwater have slowly migrated into denser, less permeable geologic units rather than flowing towards the Menominee River.

The highest concentrations of TOC in the shallow groundwater system (Zone A) are present in the area of the NE Pit and near the eastern bank of the Menominee River between Monitoring Wells GM-25A and GM-27A. The distribution of TOC throughout the entire AOC was used to estimate the mass of TOC within Units 1, 2 and 3. The results show that approximately 46 percent of the TOC mass is contained in Unit 2 material with the remaining mass is distributed between Unit 1 (approximately 19 percent) and Unit 3 (approximately 35 percent) materials. Groundwater flowing through the more permeable Unit 1 material may pick up TOC through diffusion from the other Units.

4.2.1.3 Dissolved-Phase Methane

The presence of dissolved-phase methane in groundwater is generally the result of anaerobic biodegradation of organic compounds dissolved in groundwater. The majority of organic compounds at depth in the groundwater system within the AOC are the result of historic releases from the FPS to the former NE Pit. The liquid phase of these releases subsequently infiltrated the groundwater system where organic compounds in the groundwater will move in the direction of groundwater flow.

The concentrations of dissolved-phase methane are more widely distributed than TOC; however, the main areas of dissolved-phase methane correspond to areas of high TOC. Since the highest concentrations of TOC are in the deeper portion of the groundwater system, methane formation primarily occurs at depth. The aerial extent of dissolved-phase methane concentrations above 0.5 milligrams per liter (mg/L) is shown on Figure 4-10. However, it should be noted that not all locations and depths within this contour interval contain dissolved-phase methane above 0.5 mg/L and that this is not a health based criteria, but rather, an explosivity screening value.

The maximum concentration of methane that can occur at the water table is approximately 30 mg/L, based on the solubility of methane in water; however, the solubility of methane increases by approximately 30 mg/L for every 33 feet of water column. Thus, methane may reach concentrations well above 30 mg/L at depth and still remain dissolved in groundwater. Increased depth increases the "storage capacity" for dissolved-phase methane in groundwater. When an upward vertical groundwater gradient exists (which occurs along the Menominee River), off-gassing of methane can occur as the pressure decreases, causing the transition from dissolved-phase to gas-phase.

The highest concentrations of dissolved-phase methane in the deeper groundwater system (Zone B/C) are located in the central portion of the AOC at Monitoring Wells GM-2B (460 mg/L), GM-62C (298 mg/L), GM-1 (165 mg/L) and GM-53B (147 mg/L). The detected groundwater concentrations of dissolved-phase methane are included in Table 4-6. The higher concentrations of dissolved-phase methane form a southeast-northwest trending band between Monitoring Wells GM-2B and GM-37B. The southwestern edge of this band appears to coincide with the change in vertical groundwater gradients from downward to upward near the Menominee River.

The highest concentrations of dissolved-phase methane in the shallow groundwater system occur on the western side of the AOC near the east bank of the Menominee River in Monitoring Wells GM-26A (59 mg/L), GM-27A (48 mg/L), GM-25A (40 mg/L), and GM-28A (38 mg/L). The higher concentrations of dissolved-phase methane in the shallow groundwater system coincide with the change in vertical groundwater gradient from downward, across most of the AOC, to upward near the Menominee River. The concentrations of dissolved-phase methane in the shallow groundwater system are significantly less than those encountered in the deep groundwater system (e.g., 38 mg/L at Monitoring Well GM-28A versus 165 mg/L at Monitoring Well GM-1), indicating the transition of dissolved-phase methane to gas-phase methane as the groundwater moves upward toward the Menominee River.

4.2.1.4 Metals

The distribution of metal concentrations in groundwater within the AOC appears more random than those shown in the plume distribution models for VOCs and SVOCs. Many of the metal concentrations detected fall within the general area of the VOC and SVOC plumes. However, the elevation within the groundwater system at which metals occur is more variable than for VOCs and SVOCs. The wide distribution of metals

reflects their natural background occurrence in groundwater. The detected concentrations of metals in groundwater are included in Table 4-7.

Monitoring Well GM-20 had the most occurrences and often the highest concentrations of detected metals. Eight of the detected metals (aluminum, cadmium, chromium, cobalt, copper, lead, nickel, and vanadium) had some of the highest measured concentrations in the shallow groundwater system. However, analysis of groundwater samples from the surrounding wells, completed at approximately the same elevation as Monitoring Well GM-20, either did not detect these same metals or the concentrations detected were much lower. These results suggest the lack of mobility of metals within the groundwater system and/or localized natural background conditions.

Higher concentrations for several metals were also detected in the shallow groundwater system at Monitoring Well GM-28A/B. The aerial extent of the detected metals at Monitoring Well GM-28A/B is limited based on the analytical results from the surrounding wells, for reasons noted in the preceding paragraph (similar to the results observed in the area of Monitoring Well GM-20).

Some of the highest concentrations of metals that were detected within the deep groundwater system (Zone B/C) were present in samples from Monitoring Wells GM-25B, GM-37B, GM-62C, GM-2B, and GM-32. The highest concentrations for cadmium, lead, and thallium were present at an upgradient location, Monitoring Well UG-4, away from the central area of the AOC and away from the predominant area of occurrence of VOCs and SVOCs. The highest concentration of iron (617 mg/L) was reported from Monitoring Well BR-2. These results again reflect the random nature of the presence of metals in groundwater within the AOC.

4.3 Site-Wide Groundwater Quality

A total of 141 constituents have been detected above the laboratory quantitation limit in historical groundwater samples collected from the AOC. The detected constituents in the site-wide groundwater include 36 VOCs, 35 SVOCs, 11 alcohols, 14 aldehydes, 42 inorganics/metals, two organic acids, and methane. The list of detected constituents is provided in Table 4-8 and measured concentrations of constituents are listed by chemical category in Tables 4-6, 4-7 and 4-9 through 4-12. These tables contain only constituents detected in the groundwater samples and do not include all constituents that were analyzed for but not detected. The list of all the constituents analyzed is shown in Table 4-3.

The following sections present an assessment of site-wide groundwater quality and include a discussion of the detected constituents; however, they do not address the

attenuation of these parameters. A discussion regarding attenuation of constituents in the groundwater was presented in the June 2002 RI Report and will be further discussed in the upcoming revised RI Report.

4.3.1 Comparison to Michigan Part 201 Generic Cleanup Criteria and Screening Levels

The groundwater sampling results from the AOC were compared to: State of Michigan Generic Residential and Commercial I groundwater criteria as defined in Operational Memorandum #1 (January 23, 2006) Part 201 Generic Cleanup Criteria and Screening Levels; MDEQ Part 4 Water Quality Standards for Final Acute Values and Final Chronic Values (December 11, 2006) as defined in Rule 323.1057; and the Groundwater Flammability and Explosivity Screening Level (January 23, 2006) as defined in MDEQ Rule 299.5744. The generic groundwater criteria comparison for the purpose of this evaluation includes the following:

1. Drinking Water Criteria (DWC)
2. Groundwater Volatilization to Indoor Air Inhalation Criteria (GVIAIC)
3. Groundwater Contact Criteria (GCC)
4. Groundwater/Surface Water Interface (GSI)
5. Final Acute Values (FAV)
6. Final Chronic Values (FCV)
7. Groundwater Flammability and Explosivity Screening Level (FESL)

Some of the constituents detected in the groundwater are present at concentrations above certain State of Michigan groundwater criteria. A comparison of the groundwater quality to the generic criteria is shown in Tables 4-6, 4-7 and 4-9 through 4-12. Generally, the constituent concentrations display some variability between sampling rounds. The variability between concentrations from different collection dates for a well is shown in the groundwater results tables. In some cases, a constituent concentration that is above a generic groundwater criterion from one round of groundwater sampling will not be above the generic criterion from another round of groundwater sampling. In addition, constituent concentrations may exceed established criteria; however, this does not necessarily mean there is a relevant or complete exposure pathway.

4.3.1.1 DWC

Comparison of the 141 constituents detected in the groundwater at the AOC to the generic DWC shows that 62 constituents were present at concentrations above the generic DWC. These concentrations are identified in Tables 4-7 and 4-9 through 4-12. There are no generic DWC established for 15 of the detected constituents, most notably for SVOCs and aldehydes. These constituents are identified at the end of the data tables.

While the 62 constituents identified were present at concentrations above the generic DWC, none of these constituents affect or will affect the City of Kingsford potable water supply, which also supplies public water for the portion of Breitung Township that is included in the AOC. The potable water in Kingsford is supplied from municipal wells northwest of the City, away from the areas where the drinking water criteria were exceeded. All of the residential water supply wells identified within the AOC have been abandoned, as discussed in the draft RI Report dated June 30, 2002 (ARCADIS, 2002b).

A summary of the 62 constituents present at concentrations above the generic DWC, along with the range of the concentrations measured that are above the generic criteria, and the monitoring well where the highest concentration occurs, is shown in Table 4-13. Of these constituents nine are VOCs, 23 are SVOCs, seven are alcohols, one is an aldehyde, 21 are inorganics/metals, and one is an organic acid.

The nine VOCs that were detected at concentrations above the generic DWC include: acetone, acrylonitrile, benzene, cis-1,2-dichloroethene, diethyl ether, methylene chloride, tetrachloroethene, tetrahydrofuran, and trichloroethene. The concentrations of the VOCs are identified in Table 4-9.

Many of the VOCs that are detected in only one well were also not confirmed to have a concentration above the generic DWC by multiple samples collected from that well. With the exception of benzene, diethyl ether, tetrachloroethene, and acetone, the occurrence of the VOCs that have concentrations above the generic DWC is very limited.

The 23 SVOCs that were detected at concentrations above the generic DWC include: 2-methylphenol, 2-nitrophenol, 3-methylphenol, 4-methylphenol, 3-methylphenol/4-methylphenol (m&p-cresol), 2,4-dimethylphenol, 2,4-dimethylphenol/2,5-dimethylphenol, 2,6-dimethylphenol, 3,4-dimethylphenol, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, carbazole, chrysene,

dibenzo(a,h)anthracene, hexachlorobenzene, indeno(1,2,3-cd)pyrene, phenanthrene, and phenol. The concentrations of the SVOCs are identified in Table 4-10.

The 17 metals that were present at concentrations above the generic DWC include: aluminum, antimony, arsenic, barium, cadmium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, sodium, thallium, and vanadium. The concentrations of the metals are identified in Table 4-7.

It should be noted that some metals were detected at concentrations above the generic DWC in a large number of groundwater samples collected from monitoring wells across the AOC. Some of these monitoring wells are in areas considered as background locations, and the concentrations of the metals detected in groundwater are considered representative of concentrations that occur naturally in the groundwater. The sample of groundwater in which the mercury concentration was above the generic criteria was collected from Monitoring Well GM-36. Groundwater collected from subsequent sampling rounds at Monitoring Well GM-36 did not detect mercury in the groundwater, suggesting the presence of mercury initially reported is not representative.

The four other inorganic constituents that were detected above the generic DWC include: ammonia, chloride, nitrate, and sulfate. The concentrations of these inorganics are identified in Table 4-11.

Acetaldehyde was the only aldehyde that was detected above the generic DWC. The range of concentrations of this aldehyde is identified in Table 4-12.

The seven alcohols that were detected above the generic DWC include: 1,4-dioxane, acetonitrile, ethylene glycol, isobutanol, isopropanol, methanol, and n-butanol. The concentrations of the alcohols are identified in Table 4-12.

Acetic acid/acetate, as reported by the laboratory, was the only organic acid that was detected above the generic DWC. The concentrations of this constituent are identified in Table 4-12.

However, although comparisons were made for the acetic acid/acetate concentrations to Part 201 criteria, these comparisons are not valid. The reason that the comparisons are not valid is that the analytical method currently used by Trimatrix measures acetate as well as acetic acid. The method employed by Trimatrix's subcontractor (Water Resources Institute at Grand Valley State University) is ion chromatography. Sodium hydroxide is used to convert all undissociated acetic acid to acetate, and the acetate

concentration is then measured. The analytical results thus represent acetic acid plus acetate and are not representative of acetic acid concentrations.

An example of this is the analytical result for Monitoring Well GM-25B, which had a laboratory-reported acetic acid concentration of 3,700 mg/L. This concentration of acetic acid should result in a pH of approximately 3 (highly acidic), but in fact the pH was measured as 6.0 (near neutral). Also, a rather high concentration of bicarbonate was measured. The only reasonable explanation for these results is that most of the constituent reported by the laboratory as "acetic acid" in the groundwater has actually been neutralized through a chemical reaction with carbonate-containing mineral (buffering), resulting in the formation of bicarbonate and acetate anions. Therefore, the acetic acid concentrations that currently are shown to be above the generic drinking water criterion are likely not actually above the generic criterion.

It should be noted that MDEQ has recognized this analytical issue and has appropriately modified the criterion for FAV/FCV to compensate for the actual pH of the sample and reflect the actual ions present.

4.3.1.2 GVIAIC

Site-wide groundwater quality data was also compared to the generic GVIAIC. Site-wide groundwater analytical results show that anthracene was the only constituent in the groundwater that was detected above the generic GVIAIC. This constituent concentration is identified in Table 4-10.

4.3.1.3 GCC

Site-wide groundwater quality data was compared to the generic GCC in Tables 4-7 and 4-9 through 4-12. Comparison of the 141 constituents detected in the groundwater within the AOC to the generic GCC shows that nine SVOCs were present at concentrations above the generic GCC including: anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h,)anthracene, indeno(1,2,3-c,d)pyrene, and hexachlorobenzene, as identified in Table 4-10.

The SVOC concentrations were detected above the generic GCC in Monitoring Wells GM-23, GM-25C, GM-27B, GM-27C, GM-64A, and GM-66B in one sample; however, samples collected during all subsequent sample events from these monitoring wells did not detect SVOCs in the groundwater above the laboratory detection limit. The concentrations of all the SVOCs above the generic GCC from Monitoring Wells GM-

2B, GM-26C, GM-32, GM-37A, GM-62C, GM-63B, and GM-71 are estimated values below the laboratory quantification limit.

4.3.1.4 GSI Criteria

Site-wide groundwater quality data was compared to the generic GSI criteria in Tables 4-7 and 4-9 through 4-12. The GSI criteria are generally only applicable to groundwater concentrations at the groundwater/surface water interface; however, the comparison in this IRAP is an assessment of overall groundwater quality and therefore includes all site-wide wells. Inland wells may contain constituents detected at concentrations above the GSI criteria; however, as a result of the distance of these wells from the Menominee River, this likely represents an incomplete pathway. In addition, a groundwater extraction and treatment system, which will be discussed further in Section 7.2, was designed and installed to provide hydraulic capture and subsequent treatment of groundwater, thereby preventing this groundwater from venting to the Menominee River.

Comparison of the 141 constituents detected in the groundwater within the AOC to the generic GSI shows that 42 constituents were present at concentrations above the generic GSI. Of these constituents, four are VOCs, 14 are SVOCs, three are alcohols, two are aldehydes, 18 are inorganics/metals, and one is an organic acid.

The four VOCs that were detected above the generic GSI include: 1,2,4-trimethylbenzene, acetone, acrylonitrile, and total xylene. Total xylene was detected in four monitoring wells, acetone was detected in two monitoring wells, and 1,2,4-trimethylbenzene and acrylonitrile were detected in one monitoring well, as presented in Table 4-9.

The 14 SVOCs that were detected above the generic GSI include: 2-methylphenol, 3-methylphenol, 4-methylphenol, 3-methylphenol/4-methylphenol (m&p-cresol), 2,4-dimethylphenol, 2,4-dimethylphenol/2,5-dimethylphenol, bis(2-ethylhexyl)phthalate, carbazole, di-n-butylphthalate, fluoranthene, hexachlorobenzene, naphthalene, phenanthrene, and phenol. The concentrations of the SVOCs are identified in Table 4-10.

The 15 metals that were detected above the generic GSI include: arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. The concentrations of the metals are identified in Table 4-7.

It should be noted that metals were detected above the generic GSI in a large number of groundwater samples collected from monitoring wells across the AOC. Some of these concentrations were from monitoring wells considered as background locations, where the concentrations of the metals detected in groundwater are considered representative of concentrations occurring naturally in the groundwater.

The groundwater samples in which the mercury concentration was above the generic criteria were collected from Monitoring Wells GM-21, GM-22, GM-25A, GM-26C, GM-27B, GM-36, and GM-72. Groundwater samples collected from Monitoring Wells GM-21, GM-26C, and GM-27B contained estimated values of mercury below the laboratory quantification limit. The groundwater sample collected from Monitoring Well GM-22 was a duplicate sample where mercury was not detected above the laboratory reporting limit in the original sample. In addition, groundwater collected from subsequent sampling rounds at these wells did not contain detectable concentrations of mercury in the groundwater, suggesting the presence of mercury initially reported is not representative.

The three other inorganic constituents that were detected above the generic GSI include ammonia, chloride and phosphorus. The concentrations of these inorganics are identified in Table 4-11.

Two aldehydes were detected above the generic GSI including acetaldehyde and formaldehyde. Table 4-12 presents a summary of these results.

The three alcohols that were detected above the generic GSI include: ethylene glycol, isopropanol, and methanol. The concentrations of the alcohols are identified in Table 4-12.

Acetic acid/acetate was the only organic acid that was detected above the generic GSI. The concentration of acetic acid/acetate was above the generic criterion in 27 monitoring wells and the concentration range is identified in Table 4-12. Again, it should be noted that although this concentration is dependent on the specific pH of the sample, the criteria do not account for this, and are therefore not valid comparisons. The FAV/FCV criteria discussed below appropriately incorporate pH into the calculation.

4.3.1.5 FAV

Site-wide groundwater quality data was compared to the FAV criteria in Tables 4-7 and 4-9 through 4-12. Comparison of the 141 constituents detected in the groundwater at the AOC to these criteria shows that 19 constituents were present at concentrations above the FAV. Ten of these constituents are SVOCs, one is an aldehyde, and eight are inorganics/metals.

The 10 SVOCs that were detected above the FAV include: 2-methylphenol, 3-methylphenol, 4-methylphenol, 3-methylphenol/4-methylphenol (m&p-cresol), 2,4-dimethylphenol, 2,4-dimethylphenol/2,5-dimethylphenol, carbazole, fluoranthene, phenanthrene, and phenol. The concentrations of the SVOCs are identified in Table 4-10.

The seven metals that were detected above the FAV include: barium, cadmium, chromium, copper, manganese, mercury, and zinc. The concentrations of the metals are identified in Table 4-7.

The sample of groundwater in which the mercury concentration was above the FAV was collected from Monitoring Well GM-36. Groundwater collected from subsequent sampling rounds at Monitoring Well GM-36 did not contain detectable concentrations of mercury, suggesting the presence of mercury initially reported is not representative.

The other inorganic constituent that was detected above the FAV was ammonia. The concentration of this constituent is identified in Table 4-11.

Acetaldehyde was the only aldehyde that was detected above the FAV. The concentration of acetaldehyde is shown in Table 4-12.

4.3.1.6 FCV

Site-wide groundwater quality data was compared to FCV criteria in Tables 4-7 and 4-9 through 4-12. Comparison of the 141 constituents detected in the groundwater at the AOC to these criteria shows that 34 constituents were present at concentrations above the FCV. Three of these constituents are VOCs, 12 are SVOCs, one is an alcohol, two are aldehydes, and 16 are inorganics/metals.

The three VOCs that were detected above the FCV include: 1,2,4-trimethylbenzene, acetone, and total xylene. The concentrations of VOCs are presented in Table 4-9.

The 12 SVOCs that were detected above the FCV include: 2-methylphenol, 3-methylphenol, 4-methylphenol, 3-methylphenol/4-methylphenol (m&p-cresol), 2,4-dimethylphenol, 2,4-dimethylphenol/2,5-dimethylphenol, carbazole, di-n-butylphthalate, fluoranthene, naphthalene, phenanthrene, and phenol. The concentrations of the SVOCs are identified in Table 4-10.

The 15 metals that were detected above the FCV include: arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, and zinc. The concentrations of the metals are identified in Table 4-7.

The groundwater samples in which the mercury concentration was above the FCV were collected from Monitoring Wells GM-36 and GM-72. Groundwater collected from subsequent sampling rounds at these wells did not contain detectable concentrations of mercury, suggesting the presence of mercury initially reported is not representative.

The other inorganic constituent that was detected above the FCV was ammonia. Table 4-11 presents a summary of these results.

The two aldehydes detected above the FCV include acetaldehyde and formaldehyde. The concentrations of these constituents is presented in Table 4-12.

Ethylene glycol was the only alcohol that was detected above the FCV criteria, as shown in Table 4-12.

4.3.1.7 FESL

Site-wide groundwater quality was also compared to the FESL. Dissolved-phase methane was detected in groundwater at concentrations greater than the FESL (0.52 mg/L), as presented in Table 4-6.

4.3.2 Toxicity Testing

ARCADIS conducted toxicity testing of groundwater samples collected from monitoring wells located near the Menominee River using standard methods developed for whole effluent toxicity analysis. The toxicity tests were conducted with two test species (fathead minnows [*Pimephales promelas]* and cladocerans *[Daphnia magna]*) on the water collected from 24 monitoring wells and two groundwater seep locations. In

addition, the MDEQ directly conducted several toxicity tests on the groundwater from five monitoring wells and three seep locations, as noted in Table 4-14.

The groundwater toxicity testing results for wells located near the Menominee River are summarized in Table 4-14. For each sample that was sufficiently toxic, the groundwater concentration associated with 50 percent mortality (LC_{50}) was calculated based on test organism survival in whole groundwater samples (unfiltered) and groundwater samples (unfiltered) that were diluted with laboratory water. To facilitate comparisons among samples, acute toxicity was calculated as the inverse of the LC_{50}. An acute toxicity less than 1.0 acute toxicity unit (TU_A) indicates 51 to 100 percent survival in whole groundwater. For certain samples, acute toxicity was also calculated for 50 percent *Daphnia magna* immobilization (where this response was observed).

For unfiltered groundwater samples, which overstate dissolved concentrations, collected from Monitoring Wells GM-25A, GM-25B, GM-26A, GM-26C, and GM-27A, in general, two-fold dilution or less was required to reduce the toxicity to less than 1.0 TU_A. Greater dilution was required for groundwater collected from Monitoring Well GM-25B. The acute toxicity for groundwater collected from the seep location (SP-2) in May 2004 was less than 1.0 TU_A.

Split sampling and/or repeated toxicity testing was implemented for the groundwater wells listed in Table 4-14 and nine locations within the groundwater seep area. The acute toxicity for mortality and immobilization varied considerably among tests and in several cases the classification of samples as toxic (greater than 1.0 TU_A) or non-toxic (less than 1.0 TU_A) varied among tests. One factor contributing to the observed variation was the implementation in later tests of test organism acclimation, which reduces stress related to water hardness and provides a result that is more indicative of the toxicity of constituents of interest in the water sample.

4.3.3 Seep Water

In addition to the groundwater samples collected from wells, 20 samples of water were collected from several locations within the groundwater seep areas near the Menominee River. The analytical results from the seep water samples are summarized in Table 4-15.

The seep water analytical results indicate that 58 constituents were detected above the laboratory quantitation limits. The detected constituents in the seep water samples included 14 VOCs, 17 SVOCs, three aldehydes, 23 inorganics/metals, and one organic acid.

Comparison of the 58 constituents detected in the seep water to the generic DWC shows that 16 constituents were present at concentrations above the DWC, including: benzene, diethylether, 2,4-dimethylphenol, 2,6-dimethyphenol, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, bis(2-ethylhexyl)phthalate, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-c,d)pyrene, aluminum, arsenic, iron, manganese, and vanadium.

The seep water quality was also compared to the generic GCC. Comparison of the 58 constituents detected in the seep water to the generic GCC shows that seven constituents were present at concentrations above the GCC, including: benzeno(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-c,d)pyrene. The constituent concentrations that were detected above the GCC were flagged by the laboratory as estimated values below the laboratory quantification limit.

5. Interim Response Objectives

In accordance with Section 7.1(b) of the Consent Judgment, the response activities associated with groundwater at the Site are to meet the performance objectives outlined below by October 26, 2006 (i.e., 2 years from the effective date of the Consent Judgment):

1. Eliminate the migration toward the Menominee River, at the boundary described in Paragraph 7.6(a)(x), of contaminated groundwater from the Facility that is above applicable acute and chronic criteria for the GSI, including 1.0 acute toxic units, as defined in the Administrative Rules of Part 31, Water Resources Protection, of NREPA, at MDEQ-approved GSI compliance points along the Menominee River as provided in the Part 201 Rules, including, but not limited to, between Monitoring Wells GM-66 and GM-64, by demonstrating the conditions described in Paragraph 7.6(a)(x) of the Consent Judgment; and

2. Provide adequate treatment for any contaminated groundwater extracted to comply with this Consent Judgment and state and federal law. Within 5 years of the Effective Date of this Consent Judgment, the Defendants shall demonstrate a documented decreasing trend in groundwater contamination on a continuing basis at each of the GSI monitoring wells to the MDEQ's satisfaction until this obligation is modified by the RAP.

To comply with these objectives, source removal activities have been implemented at the former disposal areas and plant site, as well as the installation of cover systems appropriately designed to minimize or eliminate the infiltration of precipitation through any remaining waste material. The primary source control action was an impermeable cover system that was installed at the former NE Pit (main source of former impacts to groundwater) to prevent any infiltration and thus eliminate any further contributions to groundwater impacts. In addition, a groundwater extraction and treatment system was installed near the Menominee River to capture and treat impacted groundwater prior to its venting to the river. An extensive network of monitoring wells has also been installed to monitor the performance of the groundwater extraction and treatment system and to ensure compliance with the performance objectives discussed above.

Additional investigations and studies were implemented to support the design of the groundwater extraction and treatment system. Extensive pilot study activities were completed to fully understand the treatment process and determine the most effective methods of both extracting and treating impacted groundwater at the Site. These activities will be discussed further in Sections 6 and 7.

6. Groundwater Extraction and Treatment Studies

As discussed in Section 5, a groundwater extraction and treatment system was designed and constructed to address response action objectives in accordance with the Consent Judgment. To facilitate this activity, additional investigations and studies were implemented to support the design of an appropriate groundwater extraction and treatment system. These investigations and studies have been documented in numerous reports. Presented below is a summary of activities completed during the groundwater extraction and treatment studies, and references to documents where more detailed information can be found.

6.1 Summary of Pilot Studies

Extensive pilot study activities were performed to fully understand and determine the most effective methods of both extracting and treating impacted groundwater at the Site. The pilot study consisted of three phases: Phases I, IIA, and IIB; which were implemented in succession as more knowledge was attained and additional methodologies were applied and tested to determine which one is the most appropriate and applicable. A discussion of each phase is presented below.

6.1.1 Phase I

The Phase I Pilot Study was completed to evaluate the response in groundwater quality and groundwater hydraulics to withdrawals of shallow groundwater in the vicinity of the seep area near the Menominee River. An extraction well (Extraction Well GMEW-1) was installed into the Zone A Sands in the vicinity of the seep area. Beginning on April 17, 2001, groundwater was extracted from the well, and initially transported off site for disposal. Upon completion of the Phase I pre-treatment system, the extracted groundwater was processed on site and then discharged to the sanitary sewer system serving the IM/K WWTP. The data accumulated during this phase was used to gain a better understanding of the groundwater hydraulics in the Zone A Sands, and to control migration of groundwater from these sands into the seep area.

The Phase I pre-treatment system consisted of an aeration tank to remove dissolved-phase methane and precipitate metals prior to discharge to the sanitary sewer. An access road, lift station, and force main with a design capacity of 100 gpm were also constructed during Phase I to facilitate the activities and also to establish necessary infrastructure for use during future phases.

The Phase I Pilot Study was conducted between April 17 and August 29, 2001, after which the Phase I pre-treatment system was shut down to facilitate construction of the

Phase II system. A detailed description of the Phase I Pilot Study can be found in the report entitled Phase 1 Pilot Study Report, Ford/Kingsford Site, Kingsford, Michigan, dated January 24, 2002, which was submitted to the MDEQ.

6.1.2 Phase II

The Phase II Pilot Study was completed to evaluate the response in groundwater quality and groundwater hydraulics to withdrawals of deep groundwater in the vicinity of Monitoring Well GM-25B. The pilot study was completed utilizing groundwater with the highest concentrations of biochemical oxygen demand (BOD) in order to evaluate treatment methods and determine the most effective method for addressing the higher concentration groundwater. In addition, the study identified necessary operation and maintenance information to be used in the design of a full-scale treatment system to ensure appropriate functioning. The Phase II Pilot Study was divided into two parts, Phase IIA and IIB as discussed below.

6.1.2.1 Phase IIA

During the Phase IIA Pilot Study, Extraction Wells GMEW-3 and GMEW-4 were installed into Zone B/C Sands, approximately 200 feet east-southeast and approximately 15 feet north of Monitoring Well GM-25B, respectively. In addition, Extraction Well GMEW-2 was installed into the Zone A Sands at a distance of several hundred feet inland of Extraction Well GMEW-1 and approximately 180 feet north of Monitoring Well GM-27A. The data collected from hydraulic tests on Extraction Wells GMEW-2, GMEW-3, and GMEW-4 was used to gain a better understanding of the groundwater hydraulics in the Zone A and B/C Sands and the hydraulic properties of the Zone B/C Sands in the vicinity of Monitoring Well GM-25B. A more complete discussion of the Phase IIA Pilot Study can be found in the report entitled Phase IIA Pilot Study Results, Ford/Kingsford Site, Kingsford, Michigan, dated July 17, 2002, which was submitted to the MDEQ.

Construction of the Phase II System was initiated prior to the shutdown of the Phase I groundwater pre-treatment system. The Phase II System was constructed to provide biological treatment of extracted groundwater containing concentrations of BOD greater than 250 mg/L. The primary components of the Phase II System were two fixed-film bioreactors with associated aeration blowers, nutrient feed systems and piping, a clarifier, and a liquid sludge storage tank. The clarifier was designed to handle a flow of approximately 100 gpm, and the bioreactors were designed to treat

approximately 1,000 pounds per day (lb/day) of BOD. The treated effluent from the Phase II System was discharged to the sanitary sewer system serving the IM/K WWTP.

6.1.2.2 Phase IIB

During Phase IIB, Extraction Well GMEW-4R was installed into the top of the Zone B/C Sands approximately 8 feet south of Monitoring Well GM-25B. Extraction Well GMEW-4R was installed to replace Extraction Well GMEW-4, which was abandoned due to excessive production of fines from the screened formation that resulted in a collapse of the well screen and the surrounding formation. In addition, redevelopment of Extraction Well GMEW-3 was completed to increase well yield and subsequent extraction from Zone B/C. The data accumulated from the additional hydraulic tests on Extraction Wells GMEW-3, GMEW-4, and GMEW-4R was used to further understand the groundwater hydraulics in the Zone B/C Sands.

During Phase IIB, two additional extraction wells were installed into the Zone A Sands. Extraction Well GMEW-5 was installed approximately 165 feet east-northeast of Monitoring Well GM-27A and Extraction Well GMEW-6 was installed approximately 140 feet northeast of Monitoring Well GM-25A. Hydraulic tests were performed on both extraction wells and the data accumulated from the testing of these wells provided additional information on groundwater hydraulics and water quality in the Zone A Sands. A more complete discussion of the hydraulic evaluations can be found in the report entitled Phase IIB Pilot Study Results, Ford/Kingsford Site, Kingsford, Michigan, dated June 25, 2004, which was submitted to the MDEQ.

6.2 Summary of Findings from Pilot Testing

The pilot tests were completed to verify that extraction could be successfully implemented to prevent the migration of impacted groundwater towards the Menominee River and to determine the most effective remedy to treat the extracted groundwater. The pilot tests determined that hydraulic capture of impacted groundwater from the Zone A and B/C Sands could be achieved at the Site. However, multiple treatment system operational constraints were identified as potential issues to be addressed to facilitate appropriate full-scale treatment. The primary obstacle identified was certain groundwater constituents (dissolved metals in combination with high alkalinity) acting as a naturally occurring coagulant, which precipitated to form flocculants (floc) with biomass and silt particles. This floc formation caused significant difficulties during evaluation of fixed-film biological treatment by bridging the void

spaces in the fixed-film bioreactors, resulting in clogged media that significantly impaired treatment efficiency.

Therefore, during Phase IIB, the treatment system was retrofitted to include one suspended growth bioreactor followed by a fixed-film biological treatment polishing step. This retrofitted unit was capable of treating approximately 600 lb/day of BOD while maintaining an effluent BOD concentration of 25 mg/L or less, which met applicable National Pollutant Discharge Elimination System (NPDES) permit requirements.

In addition to the floc formation and scaling issue, required operational information necessary for appropriate treatment was generated during the pilot tests, including appropriate nutrient dosage, oxygen delivery requirements, foam control additives, media and process piping maintenance, sludge generation and characteristics, and overall monitoring and operational procedures. This information and the most effective treatment configuration were then used to design the full-scale treatment system, which is discussed in greater detail in Section 7.

7. Interim Response Actions

Interim response measures were evaluated to address the response objectives outlined in Section 5 of this IRAP for mitigation of impacted groundwater within the AOC. The selected response actions include excavation and off-site disposal of contaminated materials from the former disposal areas that could potentially contribute to continued impacts to groundwater quality; installation of engineered cover systems over remaining waste materials to minimize or eliminate infiltration of precipitation or run-off from these areas; proposal and/or implementation of restrictive covenants (deed restrictions) to ensure that the cover systems are appropriately maintained; installation of a groundwater extraction and treatment system adjacent to the east bank of the Menominee River to capture impacted groundwater prior to venting into the river; and proposal of a Water Well Restriction Ordinance for portions of the City of Kingsford and Breitung Township. These response actions have been implemented in accordance with the Consent Judgment. Each of the response actions is discussed in the following sections.

7.1 Source Area Interim Response Actions

The RI for the AOC investigated four potential historical source areas that included the former disposal areas (RDA, NE Pit, and SW Pit), and the FPS. The response action objectives for groundwater at the source areas was the prevention of direct contact with or drinking of impacted groundwater, and the prevention of infiltration of precipitation through any remaining waste material. Response actions undertaken at each of these areas is discussed in the following sections.

7.1.1 RDA

Investigation activities completed in this area were documented in the RDA IRAP which concluded that the waste materials present were not a continuing source of groundwater impacts (ARCADIS, 2002d). Results from leachability testing and distribution of the constituents in the groundwater indicate that waste material in the RDA is not impacting groundwater quality and that the source of the constituents in the groundwater is upgradient from the RDA.

However, during the waste relocation and consolidation activities completed prior to installation of a permeable cover system (installed to address potential direct contact issues associated with the waste) solid tar material was encountered in some areas. Where tar material was observed, the waste was removed, and approximately 121 cubic yards of tar were excavated and transported off site for disposal.

While the completed response action creates a physical barrier that eliminates the direct contact pathway for any remaining waste material, it also minimized the potential for infiltration of precipitation. Extensive testing determined that the waste was not a contributing source of continuing groundwater impacts; however, the cover system provides an additional layer of protection to eliminate any potential risks.

7.1.2 NE Pit

Investigation activities in this area were documented in the NE Pit IRAP which concluded that the waste materials present were a potential continuing source of groundwater impacts (ARCADIS, 2003a). A multi-layered, impermeable cover system was placed over the waste material in order to prevent infiltration of precipitation through the waste material and to minimize or eliminate leaching of waste constituents to groundwater.

Following stripping of the clean cover material, excavation of approximately 16,000 cubic yards of waste materials was completed and the material was consolidated within the cover footprint.

During excavation activities two waste materials were generated that required handling and off-site disposal. Significant quantities of concentrated tar materials were removed, along with immediately surrounding soils. This soil and tar mixture was excavated where encountered across the area, and approximately 6,700 tons were transported off site for disposal. In addition, approximately 26 tons of drum/soil/paint sludge mixture also encountered was transported off site for disposal.

An impermeable lower liner system was placed over the waste material at the bottom of the former pit to prevent the migration of tar materials to the ground surface. After the bottom liner system was installed, a 1-foot layer of sand was placed on top of the liner for protection from debris. Following placement of the protective sand layer, two 1-foot lifts of waste material were placed over the protective sand layer. The waste was then overlain by a single 6 to 12-inch lift of sand from the stockpiled cover material. These alternating lifts of waste and sand continued until all of the waste material was consolidated within the footprint of the upper liner.

Following consolidation of the waste material above the lower liner system, the upper liner system was installed. An impermeable upper liner system was placed above the consolidated waste to minimize or eliminate infiltration of surface water through waste materials. A final asphalt surface cover was installed to provide an additional layer of protection from any potential surface water infiltration.

Removal and off-site disposal of the tar material and installation of the impermeable cover system significantly reduces or eliminates the potential for this area to be a continuing source of groundwater impacts. Complete details of the cover system and construction activities can be found in the report entitled Former Northeast Pit Interim Response Action Construction Documentation Report, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case 04-1427-CE, dated April 19, 2006, which was submitted to the MDEQ.

7.1.3 SW Pit

Investigation activities completed in this area were documented in the SW Pit IRAP which concluded that the waste materials present were not a continuing source of groundwater impacts (ARCADIS, 2003b). Results from leachability tests and distribution of the constituents in groundwater indicate that waste material in the SW Pit is not impacting groundwater quality and that the source of constituents in groundwater was the upgradient NE Pit. However, when the former channel connecting the NE and SW Pits was excavated, some tar material was encountered and, a total of 2,285 cubic yards of waste material was excavated. This stockpiled waste material was consolidated beneath the NE Pit impermeable cover system during the interim response action construction.

The permeable soil cover installed at the SW Pit (to address potential direct contact concerns associated with the waste) includes permanent storm water controls consisting of two drainage swales in the pit area for conveyance of storm water away from the permeable cover, and a subsurface infiltration gallery installed south of Lodal Park Drive. These controls provide an additional layer of protection by minimizing or eliminating any potential infiltration of precipitation or run-off through the remaining waste materials.

7.1.4 FPS

Investigation activities completed in this area were documented in the FPS IRAP which concluded any remaining soil impacts were not a continuing source of groundwater impacts (ARCADIS, 2007). All accessible waste encountered was excavated and transported off site for disposal; however, a small amount of waste material enclosed within a concrete trough remains in place below the existing Smith Castings building. The building and the concrete floor slab act as a barrier to prevent any potential precipitation or surface water run-off from infiltrating through the remaining waste material and potentially impacting groundwater.

The waste removal actions at the FPS involved excavation of concrete waste conveyance structures (containing a mixture of tar and soil) with the exception of the portion beneath the Smith Castings building. Associated piping, including a portion found beneath the foundation of another former plant building was also removed. The excavated material was initially loaded into roll-off containers and then transported off site for disposal.

Removal of all encountered waste materials and the existing building and floor slab acting as a cover system for the remaining inaccessible waste eliminates the potential for continuing impacts to groundwater. Further details regarding the waste removal activities can be found in the report entitled Former Plant Site Interim Response Action Plan and Construction Documentation Report, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case 04-1427-CE, dated October 12, 2007.

7.2 Groundwater Venting to the Menominee River

In accordance with on-going negotiations and facilitated by the pilot testing information, design of a full-scale groundwater extraction and treatment system was completed and construction was initiated on June 21, 2004. The system design and construction meet the provisions of Section 7.6 of the Consent Judgment (October 2004), which stipulated capture of all groundwater containing hazardous substances above applicable GSI criteria, adequate treatment of all contaminated groundwater extracted, and prevention of migration of impacted groundwater above regulatory standards towards the Menominee River. This interim response action to address impacted groundwater was mutually agreed upon between the MDEQ and Ford/KPC.

7.2.1 Overview of Groundwater Extraction and Treatment System Design and Construction

As mentioned above, a groundwater extraction and treatment system was designed and installed along the east bank of the Menominee River to provide hydraulic capture and subsequent treatment of groundwater with constituent concentrations above the applicable GSI criteria, preventing this groundwater from venting to the Menominee River. Extensive testing and evaluation was completed for the Zone A and B/C Sands along the river to define the exact locations of venting groundwater. The results of this testing and evaluation are discussed in the previously referenced Performance Monitoring Plan (ARCADIS, 2005) and the report entitled Addendum Performance Monitoring Plan – Groundwater Extraction System, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case No. 04-1427-CE, dated September 2006.

In accordance with the Consent Judgment, a report was prepared and submitted to the MDEQ requesting mixing zone-based criteria for the Site. This report was entitled Request for Mixing Zone-Based Criteria and Proposed Groundwater Monitoring Program, Ford-Kingsford Products Facility, Kingsford, Michigan, Court Case No. 04-1427-CE, dated November 23, 2004. In response to this request, the MDEQ provided preliminary adjusted mixing zone criteria in a letter dated March 1, 2006. In addition, the approved RAP for the Site will include authorization for venting groundwater to contain constituent concentrations above the generic GSI, but below the mixing zone-based criteria.

The extraction wells capturing groundwater and transferring it to the treatment system were installed based on the results of toxicity testing and comparison to acute criteria, which include the FAV and the whole effluent toxicity criteria. Monitoring wells were then installed on the perimeter of the extraction line to provide for monitoring and comparison to the acute criteria to ensure compliance at the extraction boundary.

ARCADIS developed a steady-state, 3-D groundwater flow model to aid in the design of the groundwater extraction system. The model was calibrated, based on data collected during the Phase I and Phase II Pilot Studies, and simulations were performed to evaluate different configurations and flow rates from extraction wells in the Zone A and B/C Sands to capture groundwater exceeding applicable criteria. The results of the initial modeling are presented in the Numerical Groundwater Flow Model report (ARCADIS, 2004d).

Based on the results of the groundwater flow model, 43 groundwater extraction wells were completed between June and November 2004, to capture groundwater venting to the Menominee River. The extraction wells were placed in areas where constituent concentrations were above the acute criteria. This groundwater extraction system included 29 shallow extraction wells installed to capture groundwater from the Zone A Sands and 14 deep extraction wells installed to capture groundwater from the Zone B/C Sands. Details regarding construction of the groundwater extraction wells are included in the Performance Monitoring Plan (ARCADIS, 2005). Appendix A to the Performance Monitoring Plan (Addendum to Numerical Groundwater Flow Model) contains updated groundwater model simulations based on recalibration of the groundwater flow model.

Based on groundwater elevation data collected in January and February 2006, it was determined that additional extraction wells were needed to achieve complete hydraulic capture of groundwater venting to the Menominee River where constituent concentrations were above the acute criteria. In April and May 2006, two new extraction wells were installed in the Zone A Sands and three new extraction wells

were installed in the Zone B/C Sands. Details regarding construction of the additional groundwater extraction wells are included in the previously mentioned Addendum Performance Monitoring Plan (ARCADIS, 2006b). The locations of the groundwater extraction wells are shown on Figure 4-9.

The groundwater extraction and treatment system is operated in connection with a NPDES Permit (No. MI0057428) granted to ARCADIS for discharging treated effluent from the groundwater treatment system to the Menominee River and has the following numerical effluent quality limits:

i. Carbonaceous Biochemical Oxygen Demand – 25 mg/L Maximum Daily Average, 40 mg/L Maximum Daily

ii. Total Phosphorus – 1.0 lb/day Maximum Daily Average

iii. Acute Toxicity (fathead minnow) – 3.0 Acute Toxic Unit Maximum Daily

iv. Acute Toxicity (daphnia magna) – 3.0 Acute Toxic Unit Maximum Daily

v. Acute Toxicity (daphnia pulex) – 3.0 Acute Toxic Unit Maximum Daily

vi. pH – 6.5 Standard Units Minimum Daily, 9.0 Standard Units Maximum Daily

7.2.2 Extraction System Process Description

This section provides a description of the major process steps for the groundwater extraction component of the system. Groundwater is pumped from each extraction well utilizing a submersible electric pump specifically designed for the hydraulic requirements of the well. Groundwater treatment system influent is received from a network of groundwater extraction wells equipped with individual subsurface conveyance piping that terminate above grade (with appurtenant valves, flow meters, and sample taps) at one of three common headers located within two pump houses (designated North Pump House and South Pump House). The North Pump House contains two 6-inch diameter header pipes that can be valved to three subsurface conveyance force mains constructed of 6-inch diameter high density polyethylene (HDPE) pipe. The South Pump House contains one 6-inch diameter header pipe that can be valved to two subsurface conveyance force mains constructed of 6-inch diameter HDPE pipe. Each of the pump houses has a redundant force main that can be used to facilitate maintenance of another force main, as needed, without shutting down any components of the extraction network.

The groundwater extraction and conveyance system consists of the following components:

- Thirty one Zone A Sands extraction wells and 17 Zone B/C Sands extraction wells, with associated duct banks and electrical controls for each well. The average flow rate from these wells ranges from approximately 4 to 20 gpm. Under normal operating conditions only 33 extraction wells operate at any one time. These include 24 extraction wells within the Zone A Sands and 9 extraction wells within the Zone B/C Sands. The remaining 15 extraction wells are designated for standby service. Operation of the standby wells may be necessary to maintain capture of the groundwater in areas during an extraction well shutdown when increased pumping rates in the adjacent extraction wells are not sufficient to maintain hydraulic capture.

- Forty-six of the extraction wells are equipped with an electric submersible extraction pump and appurtenant piping, electrical supply conduit/duct, cables/wires, valves, and instrumentation.

- Dedicated conveyance piping from each extraction well that terminates at one of two intermediate pump houses. If a conveyance pipeline between an extraction well and the pump house is determined to be unsalvageable, there are 17 spare extraction well conveyance lines that can be utilized as permanent replacements.

- Two pump houses (North Pump House and South Pump House) for metering and controlling each extraction well and for consolidation of the extracted groundwater.

- Three force mains running from the North Pump House and two force mains running from the South Pump House which terminate at the groundwater treatment plant. The groundwater conveyance force main system is configured with two active force mains and a spare at the North Pump House and one active force main and a spare at the South Pump House. The spare force mains can be deployed if an active force main requires cleaning, if an active force main fails, or if additional capacity is required for capture of the groundwater.

7.2.3 Treatment System Process Discussion

The following sections provide a description of the major process steps for the groundwater treatment component of the system.

The groundwater treatment system became fully operational in December 2005, treating approximately 400 gallons of extracted groundwater per minute. The

groundwater treatment system has the flexibility to handle a range of flows and influent contaminant loadings, depending on the pumping requirements required for hydraulic capture of the groundwater and the concentration of impacted groundwater associated with the specific extraction wells producing groundwater.

The original system design included force mains to convey groundwater influent to a subsurface vault where they would connect to a 10-inch influent header. This header fed the Pretreatment Aeration Tank, which facilitated precipitation of dissolved metals (e.g., iron and hardness constituents). Based on operating data from the first year of operation it was determined that the pretreatment system was removing only minimal amounts of dissolved metals from the influent groundwater; therefore, the pretreatment system was taken out of service. A by-pass line was incorporated into the original design so that groundwater from the extraction wells is routed to one of two pump houses (the North Pump House and the South Pump House) where it is combined in a splitter box before being discharged into the first stage biological treatment aeration basins. The first-stage aeration process removed 80 to 90 percent of the BOD through suspended biological growth and clarification.

The treated effluent/mixed liquid from the aeration basins flows by gravity into a second splitter box that distributes flow through adjustable weirs to two parallel first stage clarifiers for the settling and removal of mixed liquid solids. Clarified effluent then flows by gravity to a common wet well where it is pumped through an 8-inch force main to a third splitter box that distributes flow by gravity through adjustable weirs to the second stage biological treatment component for tertiary treatment through three submerged fixed-film bioreactors. Based on extensive operating data from the facility, ARCADIS requested that the second-stage biological treatment process be by-passed for normal operation. This request was approved by the MDEQ on February 29, 2008; therefore, a by-pass has been installed around the three bioreactors and aeration of the vessels has been discontinued. Effluent by-passed around the second stage bioreactors flows by gravity to a 10-inch diameter sewer line that feeds a fourth splitter box that distributes flow through adjustable weirs into the two parallel second stage clarifiers. Clarified effluent flows by gravity to a 12-inch diameter sewer line connected to a series of outfall diffusers in the Menominee River.

Settled solids are thickened in the first stage and second stage clarifiers using a rake mechanism. Sludge generated in the second stage clarifiers is pumped to the solids storage tank as waste activated sludge (WAS). Sludge generated in the first stage clarifier is pumped back to the aeration basins as return activated sludge (RAS), or diverted to the solids storage tank as WAS. The RAS and WAS from the first stage clarifier is controlled by the operators via adjustable timers and is determined by the operating conditions of the treatment system (e.g., sludge age, settling characteristics,

presence of filamentous biomass, etc.). Sludge in the solids storage tank is pumped to a belt filter press where the sludge is dewatered and transferred to a loading dock for off-site disposal. Water generated from the dewatering process is returned to the first stage aeration basin splitter box for additional treatment. The sludge that is wasted in the various clarifiers is stored in a Solids Storage Tank before it is sent to the belt press for dewatering. The dewatered sludge is transported off site for disposal at an appropriate landfill. For a more detailed description of the treatment system process see the above-referenced CDR.

7.2.4 Hydraulic Capture and Performance Monitoring

A monitoring network of piezometers has been established to monitor the performance of the groundwater extraction system and ensure hydraulic capture of the groundwater with constituent concentrations above the applicable criteria. Groundwater data collected from this network was used to establish a baseline condition for the groundwater extraction system. Continued monitoring of the network provides operational data that is used to confirm hydraulic capture and for making adjustments to individual well flow rates, if necessary. Compliance with the Consent Judgment, until this obligation is modified by the RAP, is demonstrated as follows:

- Establishment of a continuous hydraulic gradient from the Menominee River inwards towards the extraction wells at a distance of 70 feet from the river's edge.

- Continuous operation of the groundwater extraction system with the following allowances; the groundwater extraction system shall not be out of operation for more than an average of 4 days per well per year, and any one extraction well shall not be shut down for more than 5 weeks, unless it is replaced within that 5-week period.

Full-scale operation of the groundwater extraction system was initiated in December 2005, and steady-state conditions were achieved in early January 2006. Following the establishment of steady-state operating conditions, an evaluation of the hydraulic capture was completed for both the Zone A and B/C Sands. A static baseline condition was established for the groundwater extraction system in September 2005 and groundwater level measurements were collected on January 12, February 13, March 15-16, and August 8, 2006. Tables 7-1 through 7-3 present the groundwater measurements and elevation data for the Zone A and B/C Sands which verifies hydraulic capture.

To facilitate identifying where a landward hydraulic gradient is present (groundwater flow away from the Menominee River towards the groundwater extraction system),

Tables 7-2 and 7-3 present the nearest inland monitoring point and the nearest river monitoring point to most of the extraction wells. The groundwater data in the September 11, 2005 column represent the static baseline condition (prior to operation of the groundwater extraction system), which was used to determine the difference in groundwater elevations between the inland and river monitoring points under static baseline conditions. This groundwater data was used to determine whether there is a landward gradient at an extraction well by using the difference in the groundwater elevations between the inland and river monitoring points under pumping conditions. Where the difference between the two groundwater elevations is a positive number, the groundwater gradient is toward the Menominee River and away from the extraction well, which would indicate that hydraulic capture may have not been achieved in that area. Where the difference between the two groundwater elevations is negative, the groundwater gradient is away from the Menominee River and toward the extraction well, which indicates that hydraulic capture has been achieved in that area.

As observed in Tables 7-2 and 7-3, an overall landward (negative) gradient was established. The groundwater level data collected in August 2006 shows a greater landward hydraulic gradient than the February 2006 groundwater level data. It is apparent that the extraction system sequentially increased influence on the groundwater system over time (i.e., the difference in groundwater levels between February and August 2006 became increasingly negative indicating that the groundwater gradient was developing over time) and is away from the Menominee River.

The monitoring data clearly indicates that the groundwater extraction system, as currently configured and operated, provides hydraulic capture of the groundwater that contains constituent concentrations above the FAV and whole effluent toxicity criteria throughout the Zone A and B/C Sands. These data, along with updated groundwater flow model simulations for the groundwater extraction system, are presented in the above-referenced Addendum Performance Monitoring Plan (ARCADIS, 2006b).

7.3 Restrictive Covenants

Restrictive covenants have been prepared and will be recorded for the former SW Pit, the RDA, and a portion of the Carter Drive right-of-way. The restrictive covenants for the former NE Pit, the Delta-Do-It Center and the Smith Castings portion of the FPS have been recorded. The restrictive covenants prohibit the use of groundwater beneath the properties, and require maintenance of the cover systems installed at each area to minimize or eliminate potential for infiltration of precipitation or run-off.

Complete details for the restrictive covenants can be found in the Construction Documentation Report or IRAP for each individual area.

7.4 Water Well Restriction Ordinance

To prohibit the potential installation of water supply wells and potential future use of groundwater, ARCADIS has proposed a well restriction ordinance to the City of Kingsford and Breitung Township for the AOC. This ordinance states that no person shall allow, permit, maintain, install, or use a well on any property in the AOC with limited exceptions. All properties within the AOC are currently serviced only by public water supply. This ordinance does not restrict the installation of a well to be used for the sole purpose of dewatering property to the extent required during construction activities or to conduct groundwater removal to facilitate remedial activities. The well installation for these purposes shall be done in compliance with all applicable laws and regulations regarding the proper disposal of impacted water that may be generated during the dewatering. The proposed water well restriction ordinance is included as Appendix A.

8. Closing

Implementation of extensive investigation and characterization activities and interim response actions have fully delineated the presence of and appropriately address groundwater contamination in the AOC. Investigation activities included installation of approximately 260 soil borings, 230 monitoring wells and piezometers, 60 extraction wells, and 55 test pits to better define the hydrogeologic setting and the distribution of constituents in the groundwater within the AOC. In addition, response actions included excavation and off-site disposal of contaminated materials from the RDA, NE Pit, SW Pit and the FPS; installation of engineered cover systems over remaining waste materials to minimize or eliminate infiltration of precipitation or run-off from these areas; proposal and/or implementation of restrictive covenants (deed restrictions) to ensure that the cover systems are appropriately maintained; and installation, operation and maintenance of a groundwater extraction and treatment system adjacent to the east bank of the Menominee River to capture impacted groundwater prior to discharge into the river. Additional actions include proposal of a Water Well Restriction Ordinance for portions of the City of Kingsford and Breitung Township in the AOC. These actions will be continued, and modified as necessary and as warranted, to maintain Consent Judgment compliance and to appropriately address impacted groundwater within the AOC.

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GM-1	370815.38	25967133.86	1121.79	1123.97	230	220	230
GM-2A	370107.55	25969704.16	1121.3	1121.11	50	40	50
GM-2B	370113.03	25969704.17	1121.33	1121.19	281	271	281
GM-2C	370120.4	25969703.63	1121.36	1120.99	74	64	74
GM-3A	370138.77	25968519.05	1119.54	1119.35	84	74	84
GM-3B	370139.11	25968524.1	1119.61	1119.4	180	170	180
GM-4	374589.36	25968793.2	1125.54	1127.98	86	76	86
GM-5	373215.84	25965313.78	1122.18	1125.58	260	250	260
GM-6	373950.51	25965004.16	1124.07	1126.71	175	165	175
GM-7	370103.51	25971402.51	1107.63	1107.4	155	145	155
GM-8	367258.4	25969133.08	1043.64	1046.43	89	79	89
GM-9	369592.91	25965960.33	1053.04	1055.69	174	164	174
GM-10	371938.24	25964101.1	1056.2	1055.86	180	170	180
GM-11	375428.78	25960859.94	1067.84	1067.6	185	174.7	184.7
GM-12	373036.5	25969580.29	1120.49	1123.23	300	290	300
GM-13	371521.22	25969980.26	1116.1	1115.78	335	325	335
GM-14	374127.49	25974268.72	1115.05	1114.56	145	135	145
GM-15	374171.72	25971408.94	1127.2	1126.99	175	165	175
GM-16	375466.98	25965317.14	1130.25	1129.8	118	108	118
GM-17	372503.21	25972077.74	1111.84	1111.51	234	224.3	234.3
GM-18	372339.53	25967270.19	1120.13	1122.4	60	50	60
GM-19	372259.63	25967424.16	1117.13	1119.55	56	46	56
GM-20	372311.42	25967691.87	1119.1	1121.35	52	42	52
GM-21	370149.51	25965892.41	1055.99	1059.06	15	5	15
GM-22	370335.32	25965994.49	1064.23	1066.7	16	6	16
GM-23	370291.92	25965841.93	1055.9	1058.44	14	3.5	13.5
GM-24A	369310.81	25967825.21	1099.38	1098.96	81	71	81
GM-24B	369310.7	25967829.92	1099.22	1098.8	114	104	114
GM-24C	369310.9	25967835.23	1099.22	1098.73	198	193	198
GM-25A	372555.62	25965086.52	1047.71	1050.082	29	19	29
GM-25B	372548.99	25965088.49	1047.85	1049.992	108	98	108
GM-25C	372546.41	25965089.78	1047.94	1049.886	216	206	216
GM-26A	371712.12	25964839.72	1047.31	1049.555	40	30	40
GM-26B	371707.27	25964838.48	1047.17	1049.63	111	101	111
GM-26C	371702.08	25964837.17	1047.27	1049.555	170	160	170
GM-27A	371204.72	25965360.84	1052.45	1054.961	40	30	40
GM-27B	371202.15	25965356.52	1052.61	1055.299	155	145	155
GM-27C	371197.66	25965349.66	1052.53	1054.996	220	210	220
GM-28A	370345.73	25965962.78	1062.08	1064.55	50	40	50
GM-28B	370347.31	25965958.96	1061.85	1064.39	130	124.5	129.5
GM-29	369577.21	25965973.76	1053.15	1055.8	65	55	65
GM-30	373642.56	25965919.64	1121.73	1124.47	85	75	85
GM-30A	373634.56	25965924.16	1121.99	1124.28	76	56	76
GM-31	373215.27	25965328.57	1121.73	1124.22	115	105	115
GM-32	371521.83	25969974.27	1116.14	1115.88	145	135	145
GM-33	371541.69	25967501.63	1119.43	1119.13	89	74	89

Footnotes on Page 26.

Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GM-33R	371521.38	25967501.61	1119.33	1119.37	90	75	90
GM-34A	368950.52	25969226.47	1088.08	1088.18	40	30	40
GM-34B	368953.87	25969226.67	1088.01	1088.16	95	85	95
GM-35	373026.53	25969585.33	1120.49	1123.29	50	40	50
GM-36	374166.02	25971408.5	1127.17	1126.77	105	95	105
GM-37A	372254.59	25967423.53	1117.35	1119.92	154	144	154
GM-37B	372249.83	25967422.9	1117.29	1119.92	338	328	338
GM-38A	369015.28	25968572.95	1097.22	1096.86	105	95	105
GM-38B	369020.26	25968573.18	1097.3	1096.86	170	160	170
GM-38C	369025.16	25968573.25	1097.29	1096.96	210	200	210
GM-39	369012.77	25969905.63	1087.29	1086.97	95	85	95
GM-40A	372212.55	25969627.98	1115.18	1115.07	85	75	85
GM-40B	372212.7	25969633.07	1115.15	1114.86	130	120	130
GM-41	373040.31	25969905.67	1120.17	1119.68	50	40	50
GM-42	373318.39	25969519.93	1121.17	1121.12	82	72	82
GM-43	373853.92	25965858.55	1122.48	1125.31	74	64	74
GM-43A	373852.13	25965867.44	1122.71	1125.06	72	65	72
GM-44	373703.05	25966019.64	1122.97	1125.47	80	60	80
GM-44A	373706.79	25966013.97	1122.93	1124.92	74	59	74
GM-45	373490.47	25966023.73	1122.34	1124.92	85	70	85
GM-45A	373509.12	25966011.56	1122.94	1126.17	80	67	80
GM-46	374002.21	25965713.01	1123.01	1125.59	75	65	75
GM-47	374099.02	25965452.61	1126.11	1126.12	84	69	84
GM-47A	374099.16	25965452.69	1126.21	1126.01	81	69	81
GM-48	374082.73	25965958.81	1124.98	1127.36	85	65	85
GM-49	373173.32	25966142.34	1121.69	1124.05	94	83.5	93.5
GM-50	371536.25	25967024.62	1120.64	1120	96	80.5	95.5
GM-51	373706.87	25965416.12	1095.88	1098.44	77	67	77
GM-52	371156.66	25967202.12	1119.74	1122.13	95	75	95
GM-53A	370458.65	25967167.74	1103.76	1106.73	89	79	89
GM-53B	370460.56	25967162.71	1103.83	1106.75	205	195	205
GM-54	374299.5	25965258.4	1126.88	1126.42	90	80	90
GM-55	374598.56	25965574.94	1126.68	1126.36	85	75	85
GM-56	373439.65	25970050.95	1118.56	1121.39	47	32	47
GM-57	374816.7	25966105.77	1130.81	1130.29	86	76	86
GM-58	375180.55	25965680.09	1130.9	1130.6	85	75	85
GM-59	375422.42	25964051.44	1129.97	1131.81	124	114	124
GM-60	375446.78	25966728.12	1191.33	1190.74	107	102	107
GM-61	375823.78	25966218.75	1209.08	1211.6	143	138	143
GM-62A	372897.15	25967872.09	1124.78	1127.69	100	90	100
GM-62B	372897.07	25967888.23	1124.74	1128.05	205	195	205
GM-62C	372897.75	25967881.13	1124.77	1128	325	315	325
GM-63A	371449.36	25965078.18	1049.72	1052.271	50	45	50
GM-63B	371445.06	25965081.02	1049.72	1052.113	110	105	110
GM-64A	370716.87	25965495.72	1054.73	1057.26	43	33	43
GM-64B	370711.29	25965499.24	1055.13	1057.57	122	117	122

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GM-65	372452.91	25965328.06	1065.21	1068.213	130	120	130
GM-66A	373424.01	25964655.24	1045.7	1048.156	37	27	37
GM-66B	373426.38	25964655.64	1045.72	1048.156	135	125	135
GM-67	368696.65	25971320.52	1115.9	1115.37	127	122	127
GM-68	371140.04	25972684.12	1105.72	1105.58	150	140	150
GM-69	371085.07	25966330	1086.47	1088.98	69	59	69
GM-70	373110.26	25968797.19	1117.95	1120.52	52	42	52
GM-71	372980.55	25968893.51	1118	1120.5	49	39	49
GM-72	373100.58	25969108.04	1118.83	1121.45	53	43	53
GM-72A	373095.36	25969112.62	--	1123.2	56	46	56
GM-73	376573.92	25961545.12	1111.42	1113.9	52	42	52
GM-74	376379.2	25961263.75	1100.95	1103.35	44	34	44
GM-75	376657.88	25961116.54	1089.05	1091.51	34	24	34
GM-76	369888.1	25966127.03	1056.36	1059.96	13	3	13
GM-77	373111.15	25964772.83	1043.06	1045.258	110	105	110
GM-78	372643.09	25965078.45	1049.24	1051.717	30	20	30
GM-79	371002.59	25965391.86	1052.81	1052.37	35	25	35
GM-80	373305.4536	25970852.83	1120.7462	1120.513	123	113	123
GM-81A	371933.1619	25970883.44	--	1110.84	145	140	145
GM-81B	371941.9193	25970885.1	--	1111.32	300	295	300
GM-82A	372962.4141	25966839.72	--	1121.63	92	82	92
GM-82B	372962.5553	25966829.19	--	1121.86	157	151.7	156.7
GM-83	373842.51	25967757.3	1131.92	--	--	--	--
GM-84	373837.5829	25964430.87	1052.7204	1055.14	82	77	82
GM-85	368648.63	25971929.66	1070.49	1070.2	80	75	80
GM-87A	370750.02	25965434.46	1054.92	1054.16	42	32	42
GM-87B	370746.58	25965434.61	1055.01	1054.27	135	117	132
GM-100	370456.22	25967155.04	1103.69	1111.68	70	65.5	70.5
GM-118D	371087.61	25967940.27	1116.64	1116.32	59	54	59
GMEW-1	371261.77	25965134.55	1039.49	1041.69	--	20	30
GMEW-2	371565.67	25965390.26	1049.53	1050.44	--	23	33
GMEW-3	372463.2	25965327.63	1065.4	1066.79	--	135	145
GMEW-4	372564.96	25965083.74	1047.77	1049.19	--	100	120
GMEW-4R	372541.43	25965090.74	1047.5	1047.319	--	107	127
GMEW-5	371279.79	25965487.16	1066.13	1068.328	53	40	48
GMEW-6	372610.31	25965210.91	1060.43	1062.182	51	39	46
GMEW-7	372446.48	25965337.07	1065.85	1069.6	198	183	193
GMEW-8	371703.39	25965132.24	1044.08	1046.465	176	125	170
GMEW-9 (GMEWC-4)	372900.84	25964996.88	1048.91	1051.26	175	125	170
GMEWA-1	371107.6713	25965497.76	1054.15	1052.659	41	26	36
GMEWA-2	371178.1659	25965459.6	1053.69	1052.615	41	26	36
GMEWA-3	371245.4648	25965419.09	1053.41	1051.887	40	25	35
GMEWA-4	371313.2414	25965372.84	1049.23	1047.937	35	20	30
GMEWA-5	371348.6992	25965285.6	1042.35	1041.538	31	16	26
GMEWA-6	371326.4	25965205.69	1043.88	1042.414	32	22	27

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMEWA-7	371305.17	25965128.25	1042.34	1041.88	32	17	27
GMEWA-8	371327.75	25965052.51	1041.58	1040.6	45	20	40
GMEWA-9	371353.85	25964977.67	1040.5	1039.962	40	20	35
GMEWA-10	371410.1161	25964922.24	1041.42	1040.921	50	25	45
GMEWA-11	371477.3537	25964887.05	1043.25	1042.78	39	24	39
GMEWA-12	371549.4755	25964864.4	1044.34	1043.722	43	23	38
GMEWA-13	371622.25	25964852.86	1045.04	1044.257	40	20	35
GMEWA-14	371693.77	25964857.77	1047.01	1045.477	55	25	50
GMEWA-15	371765.1	25964868.79	1047.09	1045.666	55	20	50
GMEWA-16	371832.8	25964881.05	1047.52	1046.234	55	20	50
GMEWA-17	371901.2829	25964898.53	1047.92	1047.165	70	20	65
GMEWA-18	371979.9917	25964913.86	1048	1046.773	33	18	28
GMEWA-19	372056.069	25964931.26	1048.79	1047.269	34	19	29
GMEWA-20	372132.8059	25964949.63	1049.2	1047.929	34	19	29
GMEWA-21	372208.1289	25964967.73	1049.47	1048.611	33	23	28
GMEWA-22	372284.5238	25964984.01	1049.44	1048.418	34	24	29
GMEWA-23	372361.7552	25965003.31	1049.29	1047.853	40	23	35
GMEWA-24	372434.5541	25965037.85	1049.02	1046.736	42	22	37
GMEWA-25	372481.924	25965053.04	1049.22	1047.463	38	23	33
GMEWA-26	372527.42	25965104.85	1049.22	1048.05	37	22	32
GMEWA-27	372571.8975	25965098.33	1048.96	1047.238	36	21	31
GMEWA-28	372612.9674	25965092.26	1049.19	1047.975	40	25	35
GMEWA-28A	372632.0195	25965090.32	1049.74	1048.653	38	23	33
GMEWA-29	372094.58	25964939.78	1049.07	1050.51	32	22	27
GMEWA-30	372163.86	25964956.97	1049.26	1051.08	34	24	29
GMEWB-1	372466.51	25965049.68	1049.17	1047.165	109	99	104
GMEWC-1	373340.7446	25964699.38	1045.19	1044.278	143	123	138
GMEWC-1A	373358.7126	25964691.27	1045.68	1044.272	162.5	117.5	157.5
GMEWC-2	373173.7117	25964778.04	1043.87	1042.909	185	165	180
GMEWC-2A	373154.97	25964786.24	1043.77	1042.503	192	133	187
GMEWC-3	373043.9675	25964914.58	1046.7	1046.023	167	107	162
GMEWC-4 (GMEW-9)	372900.768	25964996.93	1048.34	1046.633	--	125	170
GMEWC-5	372717.7814	25965079.16	1050.91	1049.861	190	122	185
GMEWC-6	372513.3044	25965077.26	1048.72	1047.606	155	104	150
GMEWC-7	372331.4272	25964997.36	1049.56	1048.074	153	108	148
GMEWC-7A	372313.81	25964991.04	1049.54	1047.638	155	135	150
GMEWC-8	371747.3337	25964861.81	1047.03	1045.703	172	127	167
GMEWC-8A	371771.33	25964865.51	1047.3	1045.765	167	122	162
GMEWC-9	372604.03	25965086.17	1048.75	1047.562	124.7	114.7	119.7
GMEWC-10	372618.15	25965082.62	1049.35	1048.115	185	134	180
GMEWC-11	372652.69	25965101.95	1050.84	1052.63	195	125	190
GMEWC-12	372560.44	25965102.69	1048.4	1050.86	165	103	160
GMEWC-13	372471.24	25965088.21	1048.33	1048.43	169	115	164
GMGP-1	370036.93	25966233.86	1089.48	--	--	--	--
GMGP-2	370059.3	25966228.76	1089.55	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMGP-3	370081.43	25966228.2	1089.91	--	--	--	--
GMGP-4	370180.96	25966232.73	1088.73	--	--	--	--
GMGP-5	370216.74	25966231.65	1086.72	--	--	--	--
GMGP-6	370249.58	25966231.02	1085.76	--	--	--	--
GMGP-7	370277.56	25966229.52	1083.15	--	--	--	--
GMGP-8	370302.39	25966227.99	1080.43	--	--	--	--
GMGP-9	369891.4	25966336.48	1087.82	--	--	--	--
GMGP-10	369872.57	25966347.55	1086.92	--	--	--	--
GMGP-11	369898.94	25966365.54	1087.51	--	--	--	--
GMGP-12	369890.45	25966405.37	1089.58	--	--	--	--
GMGP-13	372428.6	25969616.52	1117.38	--	--	--	--
GMGP-14	372379.06	25969572.02	1116.64	--	--	--	--
GMGP-15	372336.22	25969615.15	1117.09	--	--	--	--
GMGP-16	369986.4	25966346.89	1089.23	--	--	--	--
GMGP-17	370022.23	25966348.43	1089.82	--	--	--	--
GMGP-18	370059.97	25966346.99	1090.74	--	--	--	--
GMGP-19	370030.26	25966436.26	1089.95	--	--	--	--
GMGP-20	370115.91	25966349.55	1090.66	--	--	--	--
GMGP-21	370199.33	25966326.82	1089.39	--	--	--	--
GMIM-1	371498.84	25965309.07	1041.73	1044.5	24	12	24
GMIM-2	371489.02	25965321.29	1041.73	1044.32	24	12	24
GMIM-3	371483.15	25965305.1	1042.15	1044.7	24	12	24
GMP-1	369680	25967400	1097	--	--	--	--
GMP-2	369760	25967620	1089	--	--	--	--
GMP-3	369550	25967610	1100	--	--	--	--
GMP-4	369560	25967800	1100	--	--	--	--
GMP-5	369220	25967740	1101	--	--	--	--
GMPZ-1	371587.2808	25965389.04	1050.11	1052.673	32	22	32
GMPZ-2	371616.3009	25965392.26	1050.68	1053.141	34	24	34
GMPZ-3	371504.4	25965325.62	1041.5	1044.076	22	12	22
GMPZ-4	372448.6786	25965279.63	1058.17	1060.63	141	131	141
GMPZ-5	371264.92	25965489.74	1065.78	1068.541	55	40	55
GMPZ-6	372623.21	25965202.05	1060.44	1063.357	46	32.5	45.5
GMPZ-7	372456.66	25965333.74	1065.94	1068.578	193	183	193
GMPZ-8	371702.84	25965122.21	1044.35	1047.5	145	125	145
GMPZ-9 (GMPZC-4)	372891.08	25965002.55	1048.31	1050.93	170	130	170
GMPZ-10	372448.11	25965317.96	1064.5	1067.53	145	135	145
GMPZA-1	372536.42	25965109.01	1049.18	1051.97	32	22	32
GMPZA-2	372473.84	25965051.05	1049.06	1051.744	33	23	33
GMPZA-3	372426.65	25965035.09	1049.07	1051.766	35	25	35
GMPZA-4	372352.44	25965001.4	1049.19	1051.811	34	24	34
GMPZA-5	372274.87	25964982.14	1049.53	1052.002	33	23	33

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMPZA-6	372199.28	25964966.31	1049.5	1052.128	30	20	30
GMPZA-7	372123.58	25964948.06	1049.17	1051.799	30	20	30
GMPZA-8	372046.93	25964930.22	1048.8	1051.644	24	14	24
GMPZA-9	371970.39	25964911.78	1048.01	1049.94	28	18	28
GMPZA-10	371892.24	25964896.93	1048.08	1050.698	35	25	35
GMPZA-11	371824.17	25964879.82	1047.42	1050.107	34	24	34
GMPZA-12	371756.18	25964867.82	1047.33	1049.734	34	24	34
GMPZA-13	371684.35	25964858.38	1046.79	1049.431	40	30	40
GMPZA-14	371613.02	25964854	1044.98	1047.735	30	20	30
GMPZA-15	371540.96	25964866.47	1044.43	1047.128	36	26	36
GMPZA-16	371469.15	25964890.54	1043.18	1045.767	35	25	35
GMPZA-17	371403.08	25964927.9	1041.49	1044.97	35	25	35
GMPZA-18	371349.12	25964986.04	1040.53	1043.15	30	20	30
GMPZA-19	371325.28	25965061.08	1041.94	1044.608	30	20	30
GMPZA-20	371306.13	25965138.88	1042.52	1045.314	25	15	25
GMPZA-21	371330.2	25965214.04	1043.69	1046.263	27	17	27
GMPZA-22	371355.56	25965279.55	1042.51	1045.236	25	15	25
GMPZA-23	372534.48	25965030.76	1049.39	1052.04	32	22	32
GMPZA-24	372501.12	25965013.55	1049.02	1051.08	33	23	33
GMPZA-25	372450.81	25964996.86	1049.34	1052.187	35	25	35
GMPZA-26	372373.15	25964970.25	1049.35	1051.949	30	20	30
GMPZA-27	372290.14	25964952.48	1049.53	1052.242	30	20	30
GMPZA-28	372214.97	25964938.19	1049.02	1051.909	28	18	28
GMPZA-29	372139.85	25964916.06	1049.23	1050.81	28	18	28
GMPZA-30	372067.57	25964891.88	1048.74	1051.296	29	19	29
GMPZA-31	371985.89	25964871.52	1048.59	1051.17	29	19	29
GMPZA-32	371913.42	25964843.91	1048.59	1051.251	36	26	36
GMPZA-33	371841.82	25964820.61	1048.06	1050.518	35	25	35
GMPZA-34	371763.06	25964815.46	1047.76	1050.405	35	25	35
GMPZA-35	371692.2	25964807.99	1046.68	1049.336	40	30	40
GMPZA-36	371615.58	25964810.16	1045.56	1048.318	31	21	31
GMPZA-37	371531.1	25964822.61	1045.83	1048.338	37	27	37
GMPZA-38	371455.6	25964846.72	1044.22	1046.561	38.5	25	38.5
GMPZA-39	371383.65	25964888.04	1042.61	1045.474	36	26	36
GMPZA-40	371323.78	25964954.56	1041.42	1043.54	30	20	30
GMPZA-41	371269.24	25965030.17	1039.36	1041.836	30	20	30
GMPZA-42	371292.32	25965231.19	1042.08	1044.728	25	15	25
GMPZB-1	372552.34	25965034.72	--	1054.47	105	95	105
GMPZC-1	373350.24	25964695.83	1045.49	1048.35	125	115	125
GMPZC-2	373164.68	25964781.99	1043.68	1046.104	139	134	139
GMPZC-3	373034.36	25964918.38	1046.6	1046.96	130	120	130
GMPZC-4 (GMPZ-9)	372891.08	25965002.55	1048.31	1050.64	170	130	170
GMPZC-5	372709.34	25965083.32	1051.09	1053.982	155	145	155
GMPZC-6	372506.65	25965078.65	1048.52	1051.246	125	115	125
GMPZC-7	372322.07	25964993.46	1049.47	1052.214	145	135	145
GMPZC-8	371761.1	25964864.18	1047.3	1050.086	145	135	145

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMPZC-9	372595.05	25965092.27	1048.73	1051.745	120	115	120
GMPZC-10	372624.06	25965086.43	1049.29	1052.283	166	156	166
GMPZC-11	373334.4	25964646.05	1046.17	1045.529	125	115	125
GMPZC-12	373136.76	25964743.05	1043.03	1046.002	142	137	142
GMPZC-13	373003.43	25964875.72	1042.92	1045.21	115	105	115
GMPZC-14	372609.75	25965045.33	1047.85	1047.376	116	111	116
GMPZC-15	372517.58	25965020.54	1049.4	1048.94	140	130	140
GMPZC-16	372328.82	25964964.55	1049.4	1048.833	128	118	128
GMPZC-17	371749.49	25964816.37	1047.41	1046.791	135	125	135
GMPZC-18	372890.32	25965001.77	1047.46	1050.07	170	160	170
GMSB-1	373114.59	25968975.03	1117.47	--	--	--	--
GMSB-2	372462.71	25968042.16	1117.22	--	--	--	--
GMSB-3	374481.4	25968493.55	1102.86	--	--	--	--
GMSB-3A	374358.13	25968456.99	1128.59	--	--	--	--
GMSB-3B	374358.76	25968500.64	1129.01	--	--	--	--
GMSB-3C	374375.92	25968644.01	1129.99	--	--	--	--
GMSB-3D	374475.01	25968680.03	1127.31	--	--	--	--
GMSB-4	373463.06	25965504.98	1119.88	--	--	--	--
GMSB-5	370022.2	25965930.38	1054.63	--	--	--	--
GMSB-6	371542.28	25968099.39	1114.58	--	--	--	--
GMSB-7	370978.1	25971034.83	1109.69	--	--	--	--
GMSB-8	370087.2	25973008.43	1097.9	--	--	--	--
GMSB-9 (GM-14)	374127.49	25974268.72	1115.05	--	--	--	--
GMSB-10 (GM-15)	374171.72	25971408.94	1127.2	--	--	--	--
GMSB-11	370921.88	25969060.31	1119.49	--	--	--	--
GMSB-12	368440.75	25970130.25	1081.67	--	--	--	--
GMSB-13	373489.95	25966663.69	1125.03	--	--	--	--
GMSB-14	371539.16	25967868.52	1115.67	--	--	--	--
GMSB-15	374478.63	25969006.22	1121.45	--	--	--	--
GMSB-16	374768.57	25964998.64	1127.57	--	--	--	--
GMSB-17	370450.3	25967152.4	1102.27	--	--	--	--
GMSB-18	371092.62	25966335.38	1086.62	--	--	--	--
GMSB-19	374292.85	25966351.63	1128.75	--	--	--	--
GMSB-20	372997.01	25968279.42	1114.12	--	--	--	--
GMSB-21	372484	25966703.97	1121.97	--	--	--	--
GMSB-22	372757.57	25971060.64	1116.58	--	--	--	--
GMSB-23	372977.68	25970705.03	1119.45	--	--	--	--
GMSB-24	374028.78	25966717.13	1128.05	--	--	--	--
GMSB-25	375412.26	25964052.25	1129.08	--	--	--	--
GMSB-26	376457.46	25966961.48	1222.08	--	--	--	--
GMSB-27	375505.37	25967521.33	1194.01	--	--	--	--
GMSB-28	372204.89	25966364.17	1120.29	--	--	--	--
GMSB-29	371808.89	25966288.31	1120.38	--	--	--	--
GMSB-30	373199.14	25968648.94	1118.03	--	--	--	--
GMSB-31	373090.79	25968568.24	1117.62	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSB-32	373084.81	25968682	1117.39	--	--	--	--
GMSB-33	373154.96	25968765.75	1117.6	--	--	--	--
GMSB-34	373153.96	25968868.47	1117.84	--	--	--	--
GMSB-35	373208.23	25969007.62	1118.51	--	--	--	--
GMSB-36	373151.11	25969134.54	1119.34	--	--	--	--
GMSB-37	373076.57	25969110.95	1118.72	--	--	--	--
GMSB-38	373008.66	25968983.68	1117.4	--	--	--	--
GMSB-39	373077.69	25968898.63	1117.13	--	--	--	--
GMSB-40	373121.99	25969024.64	1117.98	--	--	--	--
GMSB-41	372917.24	25968557.25	1115.19	--	--	--	--
GMSB-42	372884.35	25968478.88	1116.45	--	--	--	--
GMSB-43	372868.67	25968411.88	1117.73	--	--	--	--
GMSB-44	372485.24	25967904.76	1119.07	--	--	--	--
GMSB-45	372404.14	25967945.85	1117.94	--	--	--	--
GMSB-46	372400.69	25968063.39	1118.16	--	--	--	--
GMSB-47	372528.62	25968090.18	1117.19	--	--	--	--
GMSB-48	372540.55	25968004.75	1118.16	--	--	--	--
GMSB-49	371261.55	25965132.42	1039.63	--	--	--	--
GMSB-50	371602.03	25965387.35	1049.8	--	--	--	--
GMSB-51	372390.74	25965246.01	1052.19	--	--	--	--
GMSB-52	372530	25972810	1104	--	--	--	--
GMSB-53	376521.74	25961258.78	1088.81	--	--	--	--
GMSB-54	376436.83	25961340.58	1103.1	--	--	--	--
GMSB-55	376489.38	25961485.76	1102.09	--	--	--	--
GMSB-56	376363.52	25961399.64	1118.36	--	--	--	--
GMSB-57	376364.05	25961570.34	1119.84	--	--	--	--
GMSB-58	376596.03	25961375.5	1108.76	--	--	--	--
GMSB-59	376590.21	25961441.39	1109.25	--	--	--	--
GMSB-60	375016.57	25966272.01	1142.69	--	--	--	--
GMSB-61	376543.22	25961433.28	1099.96	--	--	--	--
GMSB-62	376641.97	25961281.17	1113.69	--	--	--	--
GMSB-63	376704.81	25961353.57	1094.95	--	--	--	--
GMSB-64	376661.35	25961461.25	1098.58	--	--	--	--
GMSB-65	372868.0925	25969457.15	1119.9	--	--	--	--
GMSB-66	372869.0063	25969591.71	1119.49	--	--	--	--
GMSB-67	372848.9124	25969810.8	1119.59	--	--	--	--
GMSB-68	372844.6716	25969894.87	1119.47	--	--	--	--
GMSB-69	372789.0422	25970020.71	1118.24	--	--	--	--
GMSB-70	372417.4269	25970021.1	1116.68	--	--	--	--
GMSB-71	372314.1677	25969784.41	1114.95	--	--	--	--
GMSB-72	372647.6	25969616.89	1117.17	--	--	--	--
GMSB-73	373325.4447	25968000.27	1117.97	--	--	--	--
GMSB-74	373332.8393	25967911.15	1119.14	--	--	--	--
GMSB-75	--	--	--	--	--	--	--
GMSB-76	--	--	--	--	--	--	--
GMSB-77	--	--	--	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSB-78	--	--	--	--	--	--	--
GMSB-79	--	--	--	--	--	--	--
GMSB-80	--	--	--	--	--	--	--
GMSB-81	--	--	--	--	--	--	--
GMSB-82	--	--	--	--	--	--	--
GMSB-83	--	--	--	--	--	--	--
GMSB-84	--	--	--	--	--	--	--
GMSB-85	--	--	--	--	--	--	--
GMSB-86	--	--	--	--	--	--	--
GMSB-87	373261.51	25969871.33	1118.59	--	--	--	--
GMSB-88	373547.15	25969783.89	1119.82	--	--	--	--
GMSB-89	373339.44	25969960.22	1118.42	--	--	--	--
GMSB-90	373204.2	25969815.68	1119.76	--	--	--	--
GMSB-91	373241.25	25969913.08	1120.08	--	--	--	--
GMSB-92	373282.5	25969876.47	1118.04	--	--	--	--
GMSB-93	373241.91	25969865.62	1118.84	--	--	--	--
GMSB-94	373258.98	25969845.99	1119.24	--	--	--	--
GMSB-95	372900.47	25968517.16	1114.71	--	--	--	--
GMSB-96	372967.83	25968637.16	1116.82	--	--	--	--
GMSB-97	373012.8	25968746.92	1117.44	--	--	--	--
GMSB-98	373028.85	25968687.74	1117.33	--	--	--	--
GMSB-99	372948.01	25968713.35	1116.67	--	--	--	--
GMSB-100	372834.5	25968548.8	1104	--	--	--	--
GMSB-100	372834.5	25968548.8	1114.22	--	--	--	--
GMSB-101	372881.23	25968589.35	1114.5	--	--	--	--
GMSB-102	372954.41	25968482.29	1115.3	--	--	--	--
GMSB-103	373003.96	25968574.04	1116.94	--	--	--	--
GMSB-104	372059.99	25968245.18	1113.96	--	--	--	--
GMSB-105	372048.31	25968438.96	1115.45	--	--	--	--
GMSB-106	371787.46	25968325.77	1112.85	--	--	--	--
GMSB-107	371722.1	25967834.28	1114.53	--	--	--	--
GMSB-108	370348.12	25969895.72	1121.39	--	--	--	--
GMSB-109	372097.82	25967907.18	1113.4	--	--	--	--
GMSB-110	370149.06	25970051.96	1121.75	--	--	--	--
GMSB-111	373010.88	25964903.3	1043.87	--	--	--	--
GMSB-112	372348.2	25964997.36	1048.2	--	--	--	--
GMSB-113	372774.59	25965052.97	1047.44	--	--	--	--
GMSB-114	370230.15	25967610.11	1093.56	--	--	--	--
GMSB-115	370033.81	25967607.1	1088.73	--	--	--	--
GMSB-116	370907.36	25965471.81	1054.81	--	--	--	--
GMSB-117	373021.04	25964891.78	1043.17	--	--	--	--
GMSB-118	372164.81	25964953.31	1049.26	--	--	--	--
GMSB-119	373258.05	25964738.81	1045.19	--	--	--	--
GMSB-120	371455.73	25968073.19	1115.17	--	--	--	--
GMSB-121	370571.06	25967939.24	1119.67	--	--	--	--
GMSB-122	372570.14	25965090.9	1048.35	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSB-123	373258.66	25964728.83	1044.81	--	--	--	--
GMSB-124	374018.28	25967812.19	1132.58	--	--	--	--
GMSB-125	374409.4909	25964221.21	1125.4647	--	--	--	--
GMSB-126	370862.87	25968021.53	1118.17	--	--	--	--
GMSB-127	371057.09	25967793.57	1117.62	--	--	--	--
GMSB-128	373299.5554	25970859.75	1120.7208	--	--	--	--
GMSB-129	374171.6905	25967758.65	1131.2643	--	--	--	--
GMSB-130	374020.0829	25967995.18	1131.8655	--	--	--	--
GMSB-131	373991.8157	25967637.32	1131.3169	--	--	--	--
GMSB-132	371943.5223	25964906.08	1047.6906	--	--	--	--
GMSB-133	372427.78	25965035.41	1048.95	--	--	--	--
GMSB-134	368256.41	25971476.04	1069.16	--	--	--	--
GMSB-135	373539.46	25967883.47	1125.84	--	--	--	--
GMSB-136	373634.13	25967493.39	1130.73	--	--	--	--
GMSB-137	372543.71	25965127.48	1124.12	1126.9	--	--	--
GMSB-138	371261.42	25968402.48	1117.08	--	--	--	--
GMSB-139	371001.31	25968403.48	1118.69	--	--	--	--
GMSB-140	372170.24	25964958.65	1049.09	--	--	--	--
GMSB-201	369548.98	25967612.55	1100.09	--	--	--	--
GMSB-203	369530.81	25966998.29	1097.97	--	--	--	--
GMSB-213	369473.97	25968084.99	1096.8	--	--	--	--
GMSB-213A	369473.97	25968084.99	1096.8	--	--	--	--
GMSB-217	369340.12	25968570.12	1090.47	--	--	--	--
GMSB-Quarry	370500	25967200	1096	--	--	--	--
AGMGT-1	371095.95	25965437.74	1053.62	--	--	--	--
AGMGT-2	371194.2	25965364.45	1052.98	--	--	--	--
AGMGT-3	371127.16	25965329.18	1052.79	--	--	--	--
AGMGT-4	373302.9	25965495.6	1120.99	--	--	--	--
AGMGT-5	373423.05	25965660.99	1120.61	--	--	--	--
AGMGT-6	373640.44	25965513.59	1120.62	--	--	--	--
AGMGT-7	373517.23	25965340.17	1120.32	--	--	--	--
AGMGT-8	370970.88	25965437.76	1054.04	--	--	--	--
AGMGT-9	370990.63	25965481.78	1054.04	--	--	--	--
AGMGT-10	370876.92	25965503.18	1055.51	--	--	--	--
AGMGT-11	370810.73	25965530.71	1057.41	--	--	--	--
AGMGT-12	370829.62	25965567.33	1052.59	--	--	--	--
GMSG-1	370138.66	25969703.25	1121.59	1121.54	24	23	24
GMSG-2A	370144.89	25969597.99	1121.56	1121.58	24	23.5	24.5
GMSG-2B	370145.05	25969601.67	1121.64	1121.4	36	35	36
GMSG-3A	370015.16	25969720.76	1121.73	1121.77	22	21	22
GMSG-3B	370011.99	25969720.19	1121.68	1121.41	44	43	44
GMSG-4A	370242.64	25969716.93	1121.33	1120.88	21	20	21
GMSG-4B	370246.39	25969719.24	1121.3	1120.84	42	41	42
GMSG-5	369913.76	25969722.6	1121.34	1121.24	27	26	27

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-6A	370288.72	25969492.11	1120.5	1120.96	25	24	25
GMSG-6B	370288.76	25969495.34	1120.53	1121.02	38	37	38
GMSG-6C	370293.76	25969494.47	1120.5	1120.67	41	40.2	41.2
GMSG-7A	370392.4	25969709.02	1120.28	1120.7	20	19	20
GMSG-7B	370392.72	25969705.83	1120.14	1120.58	48	47	48
GMSG-7C	370393.23	25969701.54	1120.24	1120.56	48	47	48
GMSG-8A	370144.81	25969899.15	1122.07	1121.98	25	24	25
GMSG-8B	370141.2	25969899.09	1122.08	1121.78	45	44	45
GMSG-9	369030	25970060	1092	--	15	14	15
GMSG-10	369925	25970380	1120	--	11	10	11
GMSG-11	369070	25969230	1088	--	6	5	6
GMSG-12	369990.6	25969764.21	1121.47	1121.53	11	10	11
GMSG-13	370035.71	25969763.95	1121.48	1121.73	11	10	11
GMSG-14	371936.08	25968339.73	1112.86	--	22	21	22
GMSG-15	372557.72	25968073.78	1117.08	--	17	16	17
GMSG-16	372655.32	25967785.84	1120.5	--	18	17	18
GMSG-17	370274.38	25969555.63	1120.86	1120.49	43	42	43
GMSG-18	370147.45	25969389.04	1121.93	1121.26	34	33	34
GMSG-19	370013.99	25969597.58	1121.23	1120.58	39	38	39
GMSG-20	370137.58	25969895.9	1121.93	1121.14	46	45	46
GMSG-21	373040	25969560	1122	--	37	32	37
GMSG-22	370968.5391	25971320.56	1112.44	1111.97	10	5	10
GMSG-23	373848.25	25966198.97	1127.42	1126.72	10	5	10
GMSG-24	374518.94	25965315.14	1128.11	1127.52	10	5	10
GMSG-24R	374476.21	25965291.72	1128.35	1128.07	7	2.2	7.2
GMSG-25	374799.88	25965202.47	1128.3	1127.55	10	5	10
GMSG-26	374375.21	25965133.2	1128.16	1127.53	10	5	10
GMSG-27	372837.17	25965893.39	1122.06	1121.48	10	5	10
GMSG-28	375157.37	25969237.05	1150.49	1149.98	10	5	10
GMSG-29	372550.17	25968087.96	1117.63	1117.17	25	15	25
GMSG-30	372402.53	25968191.07	1119.55	1119.01	30	20	30
GMSG-31	372387.7	25967886.31	1118.43	1118.06	21	6	21
GMSG-32	372500.51	25968007.19	1117.91	1117.3	22	6.5	21.5
GMSG-33	372539.08	25968035.46	1117.02	1116.46	20	5	20
GMSG-34	372380.8217	25969619.29	1117.31	1116.52	8	3	8
GMSG-35	374479.2635	25970587.07	1127.48	1126.96	5	0	5
GMSG-36	374352.6429	25970468.71	1127.52	1127.01	5	0	5
GMSG-37	372377.7683	25969615.95	1117.29	1116.88	40	5	40
GMSG-38	373516.3776	25969525.66	1125.31	1124.66	5	0	5
GMSG-39	371682.4949	25969254.46	1115.71	1115.27	10	0	10
GMSG-40	371883.3373	25969174.05	1116.05	1115.62	5	0	5
GMSG-41	372322.9162	25969178.26	1116.09	1115.37	5	0	5
GMSG-42	373830.882	25969985.77	1127.82	1127.19	5	0	5
GMSG-43	371675.1546	25971630.41	1111.42	1110.85	5	0	5
GMSG-44	371795.6635	25971645.13	1111.11	1110.52	5	0	5
GMSG-45	371735.4658	25971162.22	1115.28	1114.73	11	5	10.8

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-46	371965.7339	25971129.86	1112.84	1112.44	5	0	5
GMSG-47	373779.5872	25970550.75	1123.68	1123.35	5	0	5
GMSG-48	373416.6437	25969246.23	1113.96	1115.63	4	0	4
GMSG-49	370947.3243	25971106.77	1111.06	1110.27	10	6.8	9.8
GMSG-50	370963.5226	25971175.29	1111.92	1111.48	11	8	11
GMSG-51	--	--	--	--	3	2.5	3
GMSG-52	--	--	--	--	6	3.5	5.5
GMSG-53	--	--	--	--	4	2	4
GMSG-54	372199.3404	25971096.07	1112.09	1111.43	10	5	10
GMSG-55	373488.3588	25969037.21	1121.79	1121.31	10	5	10
GMSG-56	373449.3859	25968992.72	1121.82	1121.43	10	5	10
GMSG-57	373995.67	25969188.13	1124.69	1123.83	6	4	6
GMSG-58	373959.02	25969168.61	1125.03	1124.13	6	4	6
GMSG-59	371763.22	25971884.88	1114.19	1113.42	6	4	6
GMSG-60	374649.71	25970601.47	1127.12	1126.4	6	4	6
GMSG-61	373990.52	25970641.16	1123	1122.27	6	4	6
GMSG-61R	--	--	--	--	11.2	8.7	11.2
GMSG-62	373969.46	25970602.7	1123.22	1122.35	6	4	6
GMSG-62R	--	--	--	--	11	8.5	11
GMSG-63	373804.74	25966381.26	1127.76	1127.14	6	3.75	5.75
GMSG-64	373839.44	25966536.56	1128.44	--	4	2	4.33
GMSG-65	373414.02	25969762.58	1122.36	1121.72	6	3.75	5.75
GMSG-66	373526.34	25969562.58	1124.44	1123.81	6	4	6
GMSG-67	372797.02	25966141.54	1122.08	1121.55	6	4	6
GMSG-68	372460.64	25966080.2	1122.09	1121.38	7	4.75	6.75
GMSG-69	371995.26	25968788.45	1114.37	1114.45	4	1.42	3.92
GMSG-69B	371955.36	25968786.15	1114.88	1114.48	25	20	25
GMSG-69C	371955.51	25968786.03	1114.88	1114.22	38	18	38
GMSG-70	372325.88	25968948.48	1114.12	1114.25	3	1.67	2.67
GMSG-70B	372324.47	25968949.92	1114.36	1114.27	35	30	35
GMSG-70C	372324.63	25968949.7	1114.36	1114.23	35	30	35
GMSG-71	371736.26	25968972.15	1114.39	1114.83	3	1.67	2.67
GMSG-71B	371736.18	25968974.78	1114.74	1114.31	20	15	20
GMSG-72	372019.07	25968972.09	1114	1114.05	2	1.5	2.5
GMSG-72B	372018.09	25968973.44	1114.3	1113.83	20	15	20
GMSG-73	372320.09	25969819.03	1115.24	1117.55	10	3	10
GMSG-74	372580.42	25970016.75	1117.22	1119.27	10	3	10
GMSG-75	372845.19	25969813	1119.63	1123.06	10	3	10
GMSG-76	373193.3	25969683.48	1123.22	1122.54	10	3	10
GMSG-77	372954.58	25970101.36	1120.82	1120.3	10	3	10
GMSG-78	373893.17	25969976.97	1127.63	1127.06	5	2	5
GMSG-79	373039.82	25970359.02	1121.31	1120.68	5	2	5
GMSG-80	372959.33	25970444.25	1120.18	1120.48	10	3	10
GMSG-81	373028.5	25970752.25	1119.6	1119.13	10	3	10
GMSG-81B	373030.88	25970750.05	1119.51	1119.27	30	25	30
GMSG-81C	373030.69	25970749.96	1119.51	1119.28	39	37	39

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-82	372862.77	25970882.61	1117.13	1116.64	10	3	10
GMSG-82B	372864.89	25970886.79	1117.16	1116.64	35	30	35
GMSG-82C	372865.07	25970886.92	1117.16	1116.65	35	30	35
GMSG-83	372918.71	25970943.76	1118.64	1118.18	10	3	10
GMSG-83B	372916.38	25970943.75	1118.33	1117.99	35	30	35
GMSG-83C	372916.23	25970943.84	1118.33	1118	35	30	35
GMSG-84	373086.01	25970091.45	1119.97	1122.59	10	3	10
GMSG-85	372070.83	25969987.5	1114.52	1113.99	5	2	5
GMSG-86	372069.54	25969930.67	1114.55	1114.38	5	2	5
GMSG-87	372781.09	25971044.77	1116.78	1116.27	10	3	10
GMSG-87B	372778.56	25971044.64	1116.8	1116.61	25	20	25
GMSG-88	373659.55	25967787.48	1133.35	1132.61	5	2	5
GMSG-89	373757.84	25967789.1	1134.33	1133.65	5	2	5
GMSG-90	371623.88	25969564.62	1114.91	1114.26	6	0.9	5.9
GMSG-91	371747.97	25969565.46	1115.14	1114.48	8	3	8
GMSG-92	373743.19	25966597.99	1128.59	--	4	2	4.33
GMSG-93	370122.81	25970815.5	1118.48	--	6	4	6
GMSG-94	374021.9	25967540.62	1132.16	--	8	6.3	8
GMSG-95	373943.42	25967552.51	1132.29	--	4	2	4
GMSG-96	371914.14	25968137.92	1113.45	1112.97	46	36	46
GMSG-96A	371914.5891	25968133.94	1113.2167	--	25	15	25
GMSG-97	370055.28	25970269.44	1121.14	--	4	1.5	4
GMSG-98	370094.95	25970243.37	1121.37	--	4	1.5	4
GMSG-99	370267.25	25970006.38	1122.11	--	10	8	10.5
GMSG-100	370456.22	25967155.04	1103.69	1102.56	70	65	70
GMSG-101	370469.08	25967269.24	1101.18	1101.17	53	52.3	53.3
GMSG-102	370387.37	25967354	1105.09	1104.31	55	50	55
GMSG-103	370147.86	25966259.6	1088.89	1088.33	12	7.2	12.2
GMSG-104	370670	25967236.47	1097.69	1096.73	63	57.7	62.7
GMSG-105	370651.46	25966967.43	1097.33	1096.51	70	65	70
GMSG-106	369957.9	25967255.19	1088.6	1088.02	65	59.9	64.9
GMSG-107	369962.07	25967131.43	1089.27	1088.64	64	59	64
GMSG-108	370504.74	25967034.77	1109.84	1109.68	81	76	81
GMSG-109	370183.25	25966995.63	1089.66	1088.38	62	57	62
GMSG-110	369798.82	25967173.85	1094.79	1093.84	72	67	72
GMSG-111	369948.79	25966904.45	1088.87	1088.38	66	61	66
GMSG-112	370185.55	25966767.96	1089.14	1088.5	63	58	63
GMSG-113	370563.93	25966756.53	1102.36	1101.43	78	73	78
GMSG-116	370590.13	25967609.31	1121.78	1121.25	80	74.8	79.8
GMSG-117	371139.5	25967612.6	1118.83	1118.36	85	75	85
GMSG-118A	371076.9	25967940.26	1116.6	1116.19	12	9	12
GMSG-118B	371072.92	25967940.74	1116.58	1116.11	28	25	28
GMSG-118C	371066.64	25967941.6	1116.25	1115.99	42	39	42
GMSG-119	370786.54	25967419.08	1119.69	1119.11	88	83	88
GMSG-120	374032.12	25967812.86	1132.59	--	34	14	34
GMSG-122	370185.91	25966561	1090.18	1089.39	66	61	66

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-123	371153.16	25968268.42	1117.99	1117.31	54	49	54
GMSG-124	371016.42	25968073.22	1117.12	1116.66	48	43	48
GMSG-125A	371246.06	25967943.13	1115.63	1115.02	14	11	14
GMSG-125B	371240.83	25967942.98	1115.59	1114.98	22	19	22
GMSG-126	370139.9709	25969895.25	1122.0509	1121.599	49	39	49
GMSG-127	373041.46	25969903.04	1120.1316	1119.7404	40	30	40
GMSG-128	370287.36	25967201.64	1090.92	1090.3	62	57	62
GMSG-129	370293.38	25967348.41	1092.78	1092.38	23	18	23
GMSG-130	370255.41	25967285.02	1091.1	1090.51	64	59	64
GMSG-131	370236.85	25967222.9	1090.82	1090.08	62	57	62
GMSG-132	370319.66	25967270.08	1092.17	1091.6	68	63	68
GMSG-133	370909.61	25971492.18	1112.77	--	9	6.5	9
GMSG-134	370105.15	25969482.69	1122.31	1121.55	11	6.33	11.33
GMSG-135	371083.61	25967940.92	1116.4895	1116.045	43	28	43
GMSG-136	373808.75	25967757.52	1132.23	--	115	110	115
GMSG-137	373802.65	25966022.28	1124.38	1126.74	70	60	70
GMSG-138	373902.49	25966017.24	1125.46	1127.61	72	57	72
GMSG-200	369283.85	25967746.8	1100.15	1099.73	46	41	46
GMSG-202	369366.06	25967787.73	1099.81	1099.22	28	22.5	27.5
GMSG-204	369497.73	25967742.21	1100.57	1099.98	28	23	28
GMSG-205	369416.66	25967603.93	1099.65	1099.24	27	22	27
GMSG-206	369214.14	25967273.82	1090.72	1090.3	35	30	35
GMSG-207	369257.08	25967527.3	1089.69	1089.34	34	29	34
GMSG-208	369212.65	25967386.48	1087.25	1086.6	33	28	33
GMSG-209	369162.53	25967748.19	1100.73	1100.02	63	58	63
GMSG-210	369354.25	25967940.77	1100.08	1099.47	48	43	48
GMSG-211	369545.52	25967902.13	1099.24	1098.62	48	43	48
GMSG-212	369173.38	25967943.59	1098.77	1098.16	86	81	86
GMSG-214	369359.18	25968086.96	1099.2	1098.77	47	42	47
GMSG-214R	369362.41	25968085.91	1099.13	1099.13	45	40	45
GMSG-215	369322.43	25968265.19	1097.27	1096.6	55	50	55
GMSG-216	369256.03	25968089.5	1098.41	1097.48	48	43	48
GMSG-300	375445.01	25966733.32	1191.32	1190.84	25	20	25
GMSG-301	375447.03	25966727.36	1191.36	1191.01	83	73	83
GMSG-302	375447.97	25966724.61	1191.4	1190.76	10	5	10
GMSG-303	375445.05	25966579.32	1192.23	1191.6	10	5	10
GMSG-304	375496.97	25966746.7	1192.02	1191.47	10	5	10
GMSG-305	375654.81	25966815.51	1201.1	1200.43	10	5	10
GMSG-306	375511.1	25966966.2	1192.34	1191.85	10	5	10
GMSG-307	375280.99	25966749.3	1179.34	1178.6	10	5	10
GMSG-308	375540.89	25966736.37	1198.35	1197.89	9	4	9
GMSG-309	375498.17	25966814.84	1192.69	1191.86	10	5	10
GMSG-310	375571.64	25966860.3	1194.8	1194.06	6	5.3	6.3
GMSG-401	370310.62	25969264.42	1121.56	1121.02	4	1.67	4.16
GMSG-402	370220.04	25969359.64	1120.86	1120.31	4	1.67	4.16
GMSG-403	370251.57	25970118.86	1121.79	1121.2	4	1.5	4

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-404	370900.24	25971983.11	1109.98	1109.34	4	1.67	4.17
GMSG-405	370069.33	25970669.19	1118.88	1118.39	9.08	4.33	9.08
GMSG-406	370134.74	25970143.28	1121.82	1121.31	10	5.17	10.42
GMSG-407	370242.57	25970189.22	1121.94	1121.31	10	5.25	10
GMSG-408	370253.5	25969916.74	1121.78	1121.14	9	4.58	8.75
GMSG-409	369794.14	25969325.11	1123.32	1122.56	6	3	6.33
GMSG-410	369847.24	25969336.03	1122.86	1122.04	6	3.83	6.42
GMSG-411	370250.93	25968786.19	1121.45	1120.97	9	6.67	9.17
GMSG-412	370249.79	25968842.83	1121.66	1120.94	5	2.42	4.92
GMSG-413	371372.07	25969192.43	1116.53	1115.8	5	2.25	4.75
GMSG-414	371466.48	25969211	1114.22	1113.56	4	2	4.5
GMSG-415	371624.41	25970730.19	1113.04	1112.54	4	1.5	4
GMSG-416	371684.09	25969969.44	1116.44	1115.79	5	2.17	4.67
GMSG-417	373983.4	25967732.49	1132.98	1132.18	5	2.5	4.67
GMSG-417B	374037.48	25967823.1	--	--	7	5	7
GMSG-417C	374037.48	25967823.1	1132.32	1132.74	7	5	7
GMSG-418	374307.07	25966637.57	1131.8	1131.21	4	1.5	4
GMSG-419	373809.58	25967860.14	1132.71	1132.06	5	2.42	4.92
GMSG-420	373945.76	25968130.81	1132	1131.52	5	2.5	5
GMSG-421	374000.56	25968971.44	1126.89	1126.35	4	1.5	4.08
GMSG-422	373841.03	25969003.39	1127.04	1126.48	5	2.17	4.67
GMSG-423	373900.54	25969564.52	1125.44	1124.54	5	2.58	5.08
GMSG-424	373797.04	25969784.61	1125.85	1125.2	4	1.67	4.17
GMSG-425	373824.5	25969878.23	1126.11	1125.45	5	2.5	5
GMSG-426	373850.95	25970165.23	1126.53	1126.08	4	1.67	4.17
GMSG-427	373892.09	25970259.12	1126.53	1125.99	4	1.67	4.17
GMSG-428	373893.57	25970464.79	1126.58	1126.06	5	2.17	4.67
GMSG-428B	373888.17	25970463.84	1126.42	1125.72	25	20	25
GMSG-429	372897.05	25971823.96	1117.89	1117.47	4	1.5	4
GMSG-430	372754.48	25971796.19	1115.7	1114.97	5	2.58	5.08
GMSG-431	374015.92	25967796.24	1133	1133.13	7	2	7
GMSG-432	373444.36	25969509.36	1124.93	1124.77	5.92	3.92	5.92
GMSG-433	373627.84	25969528.62	1124.71	1124.76	5.1	3.2	5.1
GMSG-434	373334.09	25969596.37	1122.59	1122.05	6.25	4.25	6.25
GMSG-435	373249.64	25969819.08	1122.69	1122.64	5.33	3.33	5.33
GMSG-436	373375.87	25969699.7	1123.22	1122.89	5.92	3.92	5.92
GMSG-437	371932.66	25969868.38	1114.86	1114.71	5.5	3	5.5
GMSG-438	371952.2	25969904.14	1114.92	1114.67	5.5	3.5	5.5
GMSG-439	371949.24	25969935.84	1114.85	1114.47	5.7	2.2	5.7
GMSG-440	371909.19	25969903.66	1114.57	1114.37	5.2	2.7	5.2
GMSG-441	375210.39	25969279.96	1159.35	1158.85	9.7	7.2	9.7
GMSG-442	375211.63	25969115.55	1159.31	1158.9	10.5	8	10.5
GMSG-443	375161.77	25969100.39	1150.35	1149.37	6	3.5	6
GMSG-444	375076.44	25969165.2	1150.24	1149.42	6	3.5	6
GMSG-445	373885.42	25966309.44	1127.76	1127.1	5.8	3.3	5.8
GMSG-446	373750.15	25966224.81	1127.81	1127.21	5.7	3.2	5.7

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-447	373995.02	25967505.76	1132.24	1131.59	5.6	3.1	5.6
GMSG-448	370908.9	25971299.79	1111.93	1111.74	6.1	4.08	6.1
GMSG-449	370923.99	25971205.15	1111.66	1111.12	5.7	3.2	5.7
GMSG-450	370972.61	25971192.62	1112.07	1111.73	10.1	7.4	10.1
GMSG-451	370964.6	25971228.63	1112.57	1112.37	10	7.5	10
GMSG-452	373786.52	25966305.24	--	1127.11	5.5	3	5.5
GMSG-453	373757.96	25967626.25	1128.12	1131.79	2.5	1.5	2.5
GMSG-454	373027.25	25967692.68	1127.97	1127.52	3	1.1	3
GMSG-455	373002.01	25967717.48	1127.99	1127.4	2.5	1.5	2.5
GMSG-456	373024.2	25967739.84	1127.95	1127.5	2.6	1.1	2.6
GMSG-457	370954.4	25971255.87	1112.18	1112.06	6.5	4	6.5
GMSG-458	370959.29	25971157.94	1112.01	1111.81	8.5	6	8.5
GMSG-459	374367.68	25965281.32	1127.65	1127.44	5.5	3	5.5
GMSG-460	374618.14	25965259.14	1127.73	1127.43	5.3	2.8	5.3
GMSG-461	374607.72	25965421.77	1127.9	1127.57	5.6	3.1	5.6
GMSG-462	374814.33	25965345.18	1127.84	1127.57	4.1	2.1	4.1
GMSG-463	374565.74	25965160.81	1128.21	1127.91	5.7	3.2	5.7
GMSG-464	374742.68	25965013.83	1127.93	1127.62	5	2.5	5
GMSG-465	370900.28	25971161.57	1111.1	1110.72	7	4.5	7
GMSG-466	371027.79	25971154.75	1111.11	1110.76	8	5.5	8
GMSG-467	374028.64	25968040.57	1132.42	1131.7	5	2.5	5
GMSG-468	371021.43	25971288.42	1113.55	1112.97	10.5	8	10.5
GMSG-469	373989.01	25967580.33	1132.44	1131.73	5.1	2.6	5.1
GMSG-470	374055.88	25968403.64	1131.32	1130.69	5.1	2.6	5.1
GMSG-471	374056.09	25968471.99	1131.34	1130.62	5.8	3.3	5.8
GMSG-472	374056.47	25968539.93	1130.9	1130.2	5.2	2.7	5.2
GMSG-473	373778.24	25968404.39	1131.32	1130.66	5	2.5	5
GMSG-474	373777.81	25968472.2	1131.44	1130.78	5	2.5	5
GMSG-475	373778.35	25968540.31	1130.94	1130.16	5	2.5	5
GMSG-476	371679.08	25969523.89	1115.25	1115.04	3.5	1.5	3.5
GMSG-477	371693.29	25969607.39	1115.03	1114.61	5.1	2.5	5.1
GMSG-478	373669.84	25968039.66	1132.26	1131.48	5.2	2.7	5.2
GMSG-479A	371827.93	25968786.57	1114.58	1114.38	10	5	10
GMSG-479B	371828.08	25968786.72	1114.58	1114.38	25	20	25
GMSG-479C	371828.2	25968786.46	1114.58	1114.36	35	30	35
GMSG-480A	372227.29	25968715.91	--	1114.51	10	5	10
GMSG-480B	372227.38	25968715.77	--	1114.5	25	20	25
GMSG-480C	372227.49	25968715.9	1115.1	1114.5	38	34	38
GMSG-481A	372326.58	25968699.35	1114.99	1114.27	10	5	10
GMSG-481B	372326.4	25968699.19	1114.99	1114.26	25	20	25
GMSG-481C	372326.6	25968699.1	1114.99	1114.26	35	30	35
GMSG-482A	372324.8	25968782.43	1114.55	1113.95	10	5	10
GMSG-482B	372324.92	25968782.25	1114.55	1113.99	25	20	25
GMSG-482C	372324.96	25968782.42	1114.55	1113.98	34	32	34
GMSG-483A	372104.28	25968862.09	1114.46	1114.26	10	10	10
GMSG-483B	372104.26	25968861.89	1114.46	1114.29	25	25	25

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-483C	372104.43	25968861.93	1114.46	1114.32	35	35	35
GMSG-484A	372197.29	25968980.39	1114.72	1114.54	10	5	10
GMSG-484B	372196.98	25968980.4	1114.72	1114.52	25	20	25
GMSG-484C	372197.21	25968980.62	1114.72	1114.52	34	30	34
GMSG-485	373686.42	25968777.91	1128.88	1128.35	5	2.5	5
GMSG-486A	371869.26	25968974.19	1114.12	1113.78	10	5	10
GMSG-486B	371869.35	25968974.02	1114.12	1113.78	20	18	20
GMSG-487A	371678.13	25968857.26	1114.66	1114.44	10	5	10
GMSG-487B	371678.35	25968857.25	1114.66	1114.42	20	18	20
GMSG-487C	371678.26	25968857.01	1114.66	1114.43	38	33	38
GMSG-488A	372845.66	25970564.75	1116.82	1116.55	10	5	10
GMSG-488B	372845.52	25970564.66	1116.82	1116.58	25	23	25
GMSG-488C	372845.54	25970564.86	1116.82	1116.54	35	30	35
GMSG-489A	372864.76	25970747.94	1117.34	1116.81	10	5	10
GMSG-489B	372864.75	25970747.86	1117.34	1116.79	24	21	24
GMSG-489C	372864.93	25970747.9	1117.34	1116.8	34	30	34
GMSG-490	373809.13	25968745.91	1129	1128.52	5.2	2.7	5.2
GMSG-491	374051.17	25968780.46	1129.15	1128.56	5	2.5	5
GMSG-492	373867.75	25968792.64	1129	1128.24	5.7	3.2	5.7
GMSG-493	373928.8	25968746.97	1129.04	1128.39	4.8	2.3	4.8
GMSG-494	373895.54	25966570.9	1128.68	1127.95	4.9	2.4	4.9
GMSG-495	373861.5	25966622.86	1128.5	1127.84	3	1.7	3
GMSG-496	373800.07	25966639.57	1128.66	1127.82	3	1.7	3
GMSG-497A	372931.28	25970746.42	1118.86	1118.57	10	5	10
GMSG-497B	372931.38	25970746.27	1118.86	1118.56	25	20	25
GMSG-497C	372931.2	25970746.29	1118.86	1118.58	35	30	35
GMSG-498A	372959.34	25971038.53	1119.53	1119.27	10	5	10
GMSG-498B	372959.46	25971038.67	1119.53	1119.26	37	34	37
GMSG-499A	373055.14	25970979.16	1120.44	1120.13	13	8	13
GMSG-499C	373055.34	25970979.19	1120.44	1120.12	35	30	35
GMSG-500A	373118.25	25970884.94	1120.87	1120.52	10	5	10
GMSG-500B	373118.06	25970884.79	1120.87	1120.51	26	24	26
GMSG-500C	373118	25970884.97	1120.87	1120.53	40	36	40
GMSG-501A	372742.31	25970442.27	1117.51	1116.97	11	6	11
GMSG-501B	372742.24	25970442.42	1117.51	1117.32	34	29	34
GMSG-502A	372732.18	25970938.49	1117	1116.45	10	5	10
GMSG-502B	372732.28	25970938.34	1117	1116.42	28	23	28
GMSG-502C	372732.38	25970938.5	1117	1116.34	38	35	38
GMSG-503A	372725.78	25970765.75	1116.85	1116.27	10	5	10
GMSG-503B	372725.74	25970765.87	1116.85	1116.26	30	25	30
GMSG-504A	372727.7	25970584.68	1116.84	1116.28	11	6	11
GMSG-504B	372727.8	25970584.5	1116.84	1116.28	25	20	25
GMSG-505A	373111.21	25970767.91	1120.98	1120.6	10	5	10
GMSG-505C	373111.03	25970767.94	1120.98	1120.6	35	30	35
GMSG-506A	373996.56	25970474.02	1126.4	1125.78	10	5	10
GMSG-506B	373996.43	25970474.08	1126.4	1125.72	22	17	22

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-507	373944.56	25968228.88	1132.17	1131.83	4.9	2.4	4.9
GMSG-508	373980.27	25968127.14	1132.12	1131.83	4.2	1.7	4.2
GMSG-509	373996.49	25968171.53	1132.22	1131.61	4.2	1.9	4.2
GMSG-510	369820.72	25969278.7	1122.57	1122	5.2	2.7	5.2
GMSG-511	373996.15	25968938.39	1126.87	1126.09	4.1	1.6	4.1
GMSG-512	373928.4	25969028.51	1126.45	1125.61	4	2	4
GMSG-513	373802.18	25968944.47	1124.42	1123.52	4.5	2	4.5
GMSG-514	369811.66	25969379.6	1120.27	1119.64	4.9	2.4	4.9
GMSG-515	371694.2234	25970754.94	--	--	4	1.5	4
GMSG-516	371616.5573	25970784.02	--	--	4.3	1.8	4.3
GMSG-517	371585.0121	25970741.81	--	--	5	2	5
GMSG-518	371776.47	25969134.36	1115.6	1115.05	5	2.5	5
GMSG-519	371816.68	25969132.24	1115.47	1115.04	5.25	2.5	5.25
GMSG-520	371777.67	25969091.84	1115.63	1115.11	4.75	2.5	4.75
GMSG-521	371744.65	25969113.09	1115.41	1115.15	4.6	2.5	4.6
GMSG-522	371684.29	25969172.59	1116.04	1115.42	4.6	2.5	4.6
GMSG-523	371797.56	25969174.2	1115.68	1115.1	5.2	2.5	5.2
GMSG-524	372164.35	25969177.1	1116.24	1115.76	5.25	2.5	5.25
GMSG-525	372063.82	25969327.62	1116.19	1115.77	5.6	2.5	5.6
GMSG-526	372271.13	25969280.97	1116.15	1115.89	4.3	2.5	4.3
GMSG-527	371826.98	25969326.21	1116.06	1115.9	3.6	2.5	3.6
GMSG-528	373415.83	25969328.58	1121.6	1121.49	4.75	2.5	4.75
GMSG-529	373437.94	25969289.31	1121.33	1120.95	2.4	1	2.4
GMSG-530	373393.45	25969288.09	1121.34	1121.04	5.2	3.1	5.2
GMSG-531	370231.65	25969920.1	1121.85	1121.34	8.2	2.5	8.2
GMSG-532	370255.31	25969944.7	1121.87	1121.16	8.25	2.5	8.25
GMSG-533	370274.19	25969921.61	1121.94	1121.41	8.2	2.5	8.2
GMSG-534	372018.89	25969967.78	1114.73	1114.54	4.75	2.3	4.75
GMSG-535	372122.37	25969975.55	1114.65	1114.46	4.6	2.5	4.6
GMSG-536A	372126.89	25969284.13	1116	1115.94	10	5	10
GMSG-536B	372127.05	25969284.17	1116	1115.91	25	20	25
GMSG-537	371709.98	25969994.72	1116.85	1116.73	5	2.5	5
GMSG-538	371674.45	25970013.28	1116.53	1116.21	4.6	3.1	4.6
GMSG-539	371627.89	25969992.34	1117.09	1116.54	5	2.5	5
GMSG-540	--	--	--	--	11.3	8.8	11.3
GMSG-541	--	--	--	--	11.1	8.6	11.1
GMSG-542	373875.88	25967889.57	1133.22	1132.51	5	2.5	5
GMSG-543	373816.3	25967936.62	--	--	3.25	2	3.25
GMSG-543R	373816.3	25967936.62	1132.74	1132.13	5	2.5	5
GMSG-544	373839.09	25967867.37	1132.96	1132.38	5.2	2.5	5.2
GMSG-545	373434.87	25968939.25	1121.81	1121.67	5.6	3.1	5.6
GMSG-546	373466.61	25968970.55	1121.97	1121.58	5.4	2.9	5.4
GMSG-547	373403.27	25968984.1	1121.94	1121.61	5.4	2.9	5.4
GMSG-548	374282.77	25966666.5	1131.49	1130.47	4.7	2.2	4.7
GMSG-549	374278.35	25966567.25	1131.36	1130.85	5.1	2.6	5.1
GMSG-550	374219.01	25966626.3	1135.88	1135.63	10.8	8.3	10.8

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-551	374012.91	25969175.32	1125.1	1124.58	5	2.5	5
GMSG-552	373995.76	25969143.49	1125.11	1124.39	5.2	2.7	5.2
GMSG-553	370269.68	25969253.95	1121.43	1121.22	5.25	2.75	5.25
GMSG-554	370255.32	25969372.93	1121.06	1120.68	5.25	2.75	5.25
GMSG-555	371441.51	25969233.53	1114.79	1114.49	4.9	2.4	4.9
GMSG-556	--	--	--	--	5.2	2.5	5.2
GMSG-557A	371689.86	25971083.65	1111.98	--	10	5	10
GMSG-557B	371689.86	25971083.65	1111.98	--	25	20	25
GMSG-558A	371636.16	25971234.27	1112.03	--	11	6	11
GMSG-558B	371636.16	25971234.27	1112.03	--	32	27	32
GMSG-559A	371760.13	25971167.46	1111.62	--	18	8	18
GMSG-559B	371760.13	25971167.46	1111.62	--	34	29	34
GMSG-560A	371914.93	25971221.92	1112.58	--	11	6	11
GMSG-560B	371914.93	25971221.92	1112.58	--	21	16	21
GMSG-561A	372031.82	25971176.14	1112.59	--	14	9	14
GMSG-561B	372031.82	25971176.14	1112.59	--	36	31	36
GMSG-562A	371962.8	25971125.09	1112.58	--	20	15	20
GMSG-562B	371962.8	25971125.09	1112.58	--	35	30	35
GMSG-563	372186.69	25971095.08	1112	--	26	21	26
GMSG-564	372206.96	25971175.21	1112.31	--	10	5	10
GMSG-565	370139.0651	25970825.04	--	--	5.2	2.25	5.2
GMSG-566	370153.0188	25970806.27	--	--	5	1.9	5
GMSG-567	370138.5916	25970800.08	--	--	4.75	1.7	4.75
GMSG-568	375374.4056	25964555.81	--	--	5	2.5	5
GMSG-569	375438.3153	25964571.29	--	--	5	2.5	5
GMSG-570	375404.7367	25964610.37	--	--	4.75	2.25	4.75
GMSG-571	375406.4163	25964516.79	--	--	4.4	1.9	4.4
GMSG-572	372797.6168	25971927.44	--	--	4.3	1.8	4.3
GMSG-573	372828.7287	25971782.52	--	--	2.75	1.25	2.75
GMSG-574	373795.7344	25970654.7	--	--	4.5	2	4.5
GMSG-575	373812.3785	25970581.59	--	--	3.25	1.25	3.25
GMSG-576	373728.8404	25970577.79	--	--	5	2.5	5
GMSG-577	371765.5603	25971890.43	--	--	20	10	20
GMSG-578A	371822.1872	25971878.22	--	--	8	3	8
GMSG-578B	371822.31	25971878.17	--	--	25	20	25
GMSG-579A	371896.2429	25971808.27	--	--	10	5	10
GMSG-579B	371896.2779	25971808.13	--	--	23	18	23
GMSG-580A	371872.2397	25971690.13	--	--	10	5	10
GMSG-580B	371872.132	25971690.11	--	--	27	22	27
GMSG-581A	371784.7594	25971628.94	--	--	10	5	10
GMSG-581B	371784.8348	25971628.91	--	--	32.5	27	32.5
GMSG-582	--	--	--	--	25	20	25
GMSG-583	371593.09	25971751.89	--	--	17	7	17
GMSG-584	374005.7745	25970200.3	--	--	5.1	2.6	5.1
GMSG-585	373825.8368	25970205.77	--	--	4.6	2.1	4.6
GMSG-586	373776.16	25969863	--	--	5.2	2.7	5.2

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-587	373842.0058	25969619.49	--	--	5.1	2.6	5.1
GMSG-588	373784.9949	25969807.44	--	--	5	2.5	5
GMSG-589	373957.0959	25969583.72	--	--	4.75	2.25	4.75
GMSG-590	373929.0325	25969522.56	--	--	5.2	2.7	5.2
GMSG-591	--	--	--	--	5.1	2.6	5.1
GMSG-592	--	--	--	--	5	2.5	5
GMSG-593	--	--	--	--	4.25	1.75	4.25
GMSG-594	--	--	--	--	6.75	4.25	6.75
GMSG-595	--	--	--	--	4.6	2.1	4.6
GMSG-596	--	--	--	--	4.4	1.9	4.4
GMSG-597	--	--	--	--	4.8	2.3	4.8
GMSG-598	--	--	--	--	4.8	2.3	4.8
GMSG-599	--	--	--	--	4.5	2	4.5
GMSG-600	--	--	--	--	5	2.5	5
GMSG-601	--	--	--	--	5	2.5	5
GMSG-602	--	--	--	--	4.6	2.1	4.6
GMSG-603	--	--	--	--	5	2.5	5
GMSG-604	--	--	--	--	5.3	2.8	5.3
GMSG-605	--	--	--	--	4.8	2.3	4.8
GMSG-606	--	--	--	--	9.1	6.6	9.1
GMSG-607	--	--	--	--	8.2	5.7	8.2
GMSG-608	--	--	--	--	5.2	2.7	5.2
GMSG-609	--	--	--	--	5.3	2.8	5.3
GMSG-610	--	--	--	--	10.1	7.6	10.1
GMSG-611	--	--	--	--	5.2	2.7	5.2
GMSG-612	--	--	--	--	5.3	2.8	5.3
GMSG-613	--	--	--	--	5.2	2.7	5.2
GMSG-614	--	--	--	--	8.3	5.8	8.3
GMSG-615	--	--	--	--	5.2	2.7	5.2
GMSG-616	--	--	--	--	5.3	2.8	5.3
GMSG-617	--	--	--	--	5	2.5	5
GMSG-618	--	--	--	--	5.2	2.7	5.2
GMSG-619	--	--	--	--	5.2	2.7	5.2
GMSG-620	--	--	--	--	11.2	8.7	11.2
GMSG-621	--	--	--	--	11.3	8.8	11.3
GMSG-622	--	--	--	--	11.1	8.6	11.1
GMSG-623	--	--	--	--	5.2	2.7	5.2
GMSG-624	--	--	--	--	5.3	2.8	5.3
GMSG-625	--	--	--	--	11.2	8.7	11.2
GMSG-626	--	--	--	--	8.8	6.3	8.8
GMSG-627	--	--	--	--	5.2	2.5	5.2
GMSG-628	--	--	--	--	9	6.5	9
GMSG-629	--	--	--	--	5	2.5	5
GMSG-630	--	--	--	--	4.9	2.4	4.9
GMSG-631	--	--	--	--	5.1	2.6	5.1
GMSG-632	--	--	--	--	4.9	2.4	4.9

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GMSG-633	--	--	--	--	5	2.5	5
GMSG-634	--	--	--	--	8	5.5	8
GMSG-635	--	--	--	--	8	5.5	8
GMSG-636	--	--	--	--	5.2	2.7	5.2
GMSG-637	--	--	--	--	8	5.5	8
GMSG-638	--	--	--	--	5.5	3	5.5
GMSG-639	--	--	--	--	5.5	3	5.5
GMSG-640	--	--	--	--	5.5	3	5.5
GMSG-641	--	--	--	--	5.5	3	5.5
GMSG-642	--	--	--	--	5.5	3	5.5
GMSG-643	--	--	--	--	5.5	3	5.5
GMSG-644	--	--	--	--	5.5	3	5.5
GMSG-645	--	--	--	--	15	9.7	14.7
GPR-1	369403.153	25967739.24	1100	--	--	--	--
GPR-2	370037.6306	25967741.38	1088	--	--	--	--
GPR-3	370497.234	25967742.93	1121	--	--	--	--
GPR-4	370163.4284	25967521.73	1091	--	--	--	--
GPR-5	370156.7387	25967671.72	1091	--	--	--	--
GPR-6	370158.8323	25967837.81	1092	--	--	--	--
GPR-7	369903.0122	25967742.43	1087	--	--	--	--
GPR-8	370003.1145	25969383.35	1122	--	--	--	--
GPR-9	370487.9075	25969225.84	1121	--	--	--	--
GPR-10	369953	25969925.75	1122	--	--	--	--
GPR-11	370107.0793	25969053.71	1120	--	--	--	--
GPR-12	369746.5688	25969053.16	1094	--	--	--	--
GPR-13	368996.6227	25969252.96	1088	--	--	--	--
GPR-14	368994.4713	25969718.17	1089	--	--	--	--
GPR-15	369429.4716	25970558.29	1120	--	--	--	--
GPR-16	369409.8379	25969892.2	1121	--	--	--	--
GPR-17	368062.5143	25968716.71	1094	--	--	--	--
GPR-18	369651.3862	25969381.84	1096	--	--	--	--
GPR-19	370653.8784	25969721.24	1121	--	--	--	--
GPR-20	369820.8367	25970380.66	1120	--	--	--	--
GPR-21	369038.1489	25970056.86	1092	--	--	--	--
SG-1	369499.42	25965998.51	1037.31	1037.12	--	--	--
SG-2	372660.71	25965009.43	1034.28	1037.25	--	--	--
SG-3	375314.5	25960766.32	1035.66	1037.93	--	--	--
SG-4	367184.31	25969049.61	1032.97	1037.67	--	--	--
SG-5	--	--	--	1037.6	--	--	--
SG-6	371203.53	25965122.24	--	1037.61	--	--	--
SG-7	371194.46	25965118.55	--	1037.58	--	--	--
SG-8	371675.58	25964778.51	--	1036.6	--	--	--
SG-9	372662.94	25965007.59	--	1037.4	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
RTP-1	373632.11	25965588.19	1118.95	--	--	--	--
RTP-2	373772.67	25965555.16	1125.01	--	--	--	--
RTP-3	373738.87	25965880.03	1120.28	--	--	--	--
RTP-4	373492.57	25966023.38	1122.49	--	--	--	--
RTP-5	373536.18	25965683.14	1118.23	--	--	--	--
RTP-6	373417.11	25965684.65	1119.4	--	--	--	--
RTP-7	373394.13	25965575.2	1119.75	--	--	--	--
RTP-8	373294.85	25965649.64	1122.19	--	--	--	--
RTP-9	373146.28	25965442.49	1123.34	--	--	--	--
RTP-10	373268.2	25965331.77	1122.55	--	--	--	--
RTP-11	373387.56	25965365.18	1119.61	--	--	--	--
RTP-12	373445.28	25965208.19	1120.79	--	--	--	--
RTP-13	373531.42	25965294.25	1115.36	--	--	--	--
RTP-14	373510.54	25965466.62	1119.02	--	--	--	--
RTP-15	373475	25965150	1111	--	--	--	--
RTP-16	373385	25965170	1118	--	--	--	--
TP-1	373113.84	25969103.09	1118.5	--	--	--	--
TP-2	373071.64	25969066.77	1118.46	--	--	--	--
TP-3	373047.06	25968926.8	1115.67	--	--	--	--
TP-4	373060.29	25968833.27	1116.82	--	--	--	--
TP-5	373135.83	25968627.47	1116.54	--	--	--	--
TP-5A	373135.83	25968627.47	--	--	--	--	--
TP-6	373142.45	25968545.32	1117.74	--	--	--	--
TP-7	372922.36	25968557.95	1114.82	--	--	--	--
TP Shingle (TP-7)	372922.36	25968557.95	--	--	--	--	--
TP-8	373070.43	25968623.79	1117.68	--	--	--	--
TP-9	372840	25968490	1118	--	--	--	--
TP-10	372983.93	25968781.95	1117.47	--	--	--	--
TP-11	372786.87	25968413.67	1117.19	--	--	--	--
TP-12	373199.74	25968806.84	1118.33	--	--	--	--
TP-13	373067.79	25968866.58	1117.43	--	--	--	--
TP-14	373139.52	25968850.25	1117.9	--	--	--	--
TP-15	372978.21	25968944.49	1116.82	--	--	--	--
TP-16	373004.8	25969114.38	1118.65	--	--	--	--
TP-17	373117.93	25969224.18	1119.64	--	--	--	--
TP-18	373216.7	25969195.49	1119.85	--	--	--	--
TP-19	373253.51	25969068.12	1118.83	--	--	--	--
TP-20	373208.61	25968940.04	1118.13	--	--	--	--
TP-21	373138.89	25968937.55	1117.49	--	--	--	--
TP-22	372926.83	25969057.68	1117.75	--	--	--	--
TP-23	372980.38	25969220.08	1120.43	--	--	--	--
TP-24	373239.16	25969286.13	1120.54	--	--	--	--
TP-25	373005.73	25968825.77	1116.98	--	--	--	--
TP-26	373250	25968980	1116.97	--	--	--	--
TP-27	373204.13	25969265.47	1120.35	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
TP-27A	373157.49	25969289.17	1120.11	--	--	--	--
TP-28	373060.92	25969175.21	1119.05	--	--	--	--
TP-29	372938.09	25968686.29	1116.42	--	--	--	--
TP-30	372944.23	25968479.07	1115.12	--	--	--	--
TP-31	373274.79	25968960	1118.8	--	--	--	--
TP-32	373275	25969029	1119.2	--	--	--	--
UG-1	375709.81	25968235.56	1178.23	1177.92	91	81	91
UG-2	374162.14	25971404.04	1127.16	1126.57	58	48	58
UG-3	374965.75	25972102.74	1125.24	1124.95	59	44	59
UG-4	373267.47	25972579.93	1115.01	1114.74	118	103	118
UG-5	372532.13	25972817.56	1103.63	1106.56	149	139	149
UG-6	372515.77	25972811.88	1103.96	1106.97	251	236	251
UG-7	374148.28	25969987.88	1127.27	1129.04	--	--	--
USGS	369621.48	25973639.07	1088.48	1091.94	--	--	--
BR-1	370569.06	25967231.16	1095.34	1097.75	226	206	226
BR-2	375082.81	25969505.04	1142.13	1145.35	85	75	85
BR-3	373542	25966649.38	1125.53	1128.21	127	122	127
BR-4	371542.86	25967493.75	1119.5	1119.25	105	95	105
BR-5B	373576.85	25969321.3	1119.92	1122.58	198	188	198
BR-5A	373587.64	25969317.93	1119.7	1122.32	98	88	98
BR-6	371888.37	25971393.08	1106.8	1109.56	169	149	169
CW-1	368596.63	25967738.44	1084.5	1086.95	140	130	140
EPA-97-1	369460	25967740	1100	--	86	66	86
EPA-97-2	369436.2087	25967705.91	1100	--		20	34
EW-1	370230.07	25967406.71	--	1090.67	--	--	--
EW-2	370224.94	25967331.13	--	1089.76	--	--	--
EW-3	370217.7	25967257.38	--	1089.76	--	--	--
EW-4	370210.88	25967181.69	--	1089.59	--	--	--
EW-5	370202.99	25967107.11	--	1089.43	--	--	--
EW-6	370303.24	25967365.19	--	1093.03	--	--	--
EW-7	370301.63	25967288.45	--	1091.98	--	--	--
EW-8	370295.1	25967213.62	--	1091.02	--	--	--
EW-9	370287.22	25967137.52	--	1090.27	--	--	--
GP-1A	370230	25967330	1090	--	--	--	--
GP-1B	370230	25967330	1090	--	--	--	--
GP-1C	370230	25967330	1090	--	--	--	--
GP-2A	370300	25967180	1091	--	--	--	--
GP-2B	370300	25967180	1091	--	--	--	--
GP-3	370200	25967100	1090	--	--	3	7

Footnotes on Page 26.

Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
GP-4	370230	25967565	1095	--	--	--	--
GP-5	370138	25967275	1088	--	--	6	11
GP-6	370150	25967400	1088	--	--	--	--
GP-7	370295	25966970	1090	--	--	--	--
GP-8	370325	25967215	1093	--	--	5	8
GP-9	370325	25967385	1100	--	--	--	--
GP-10	370390	25967231	1100	--	--	--	--
GP-11-A	370389.96	25967383.57	1106.41	1108.83	--	--	--
GP-11-B	370389.96	25967383.57	1105	--	--	--	--
GP-12A	370340	25967475	1103	--	--	--	--
GP-12B	370340	25967475	1103	--	--	--	--
GP-13A	370150	25967465	1089	--	--	--	--
GP-13B	370150	25967465	1089	--	--	--	--
GP-14	370270	25967620	1100	--	--	20	25
GP-15A	370445	25967475	1120	--	--	--	--
GP-15B	370445	25967475	1120	--	--	--	--
GP-16A	370050	25967410	1088	--	13	8	13
GP-16B	370050	25967410	1088	--	25	20	25
GP-16C	370050	25967410	1088	--	40	35	40
GP-17A	370025	25967090	1088	--	--	--	--
GP-17B	370025	25967090	1088	--	--	--	--
GP-18A	370200	25967000	1090	--	--	--	--
GP-18B	370200	25967000	1090	--	--	--	--
GP-19	370400	25966925	1093	--	--	5	15
GP-20-A	370460	25967220	1098	--	--	--	--
GP-20-B	370460	25967220	1098	--	--	--	--
Hambel	--	--	--	--	--	--	--
Krans	--	--	--	--	--	--	--
Michaud	--	--	--	--	--	--	--
Schnieder	--	--	--	--	--	--	--
Grailer	--	--	--	--	--	--	--
MP-1S	375429.1	25960847.89	1067.51	1067.27	--	--	--
MP-2D	376004.45	25960995.79	1072.07	1071.69	--	--	--
MP-2S	375998.36	25960988.64	1071.99	1071.62	--	--	--
MP-3D	376200.69	25960140.78	1081	1080.49	--	--	--
MP-3S	376210.64	25960141.95	1080.92	1080.47	--	--	--
MPMW-4	--	--	--	--	--	--	--
MW-1A	371576.48	25969464.74	1114.18	1114.3	45	35	45
MW-1B	371574.4	25969472.66	1114	1114.53	95	86	95
MW-2B	371711.17	25966840.02	1122.5	1121.46	110	102	110
MW-2A	371715.62	25966838.11	1121.7	1123.32	52	42	52
MW-3	373619.92	25969322.97	1119.25	1121	52	42	52
MW-4	373575.61	25966643.1	1125.8	1127.27	90	80	90
MW-5	375100.82	25969530.63	1142.44	1145.32	93	83	93
MW-6	375108.95	25965667.39	1128.26	1129.03	121	111	121

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
MW-7	375100.54	25965671.65	1128.38	1129.73	37	27	37
MW-8	374162.63	25968151.45	1131.44	1133.87	141	133	141
MW-9A	371543.64	25968084.09	1115.04	1115.96	65	57	65
MW-9B	371544.24	25968088.77	1115.03	1115.92	115	107	115
MW-10	374476.32	25966707.04	1131.41	1133.19	102	95	102
MW-96-1	373293.16	25969350.72	1120.51	1122.47	75	65	75
MW-96-2	373288.42	25968453.15	1119.02	1121.32	65	60	65
MW-96-3	373281.64	25968885.78	1118.76	1121.71	71	66	71
MW-96-4	373586.87	25968560.37	1120.95	1122.97	65	60	65
P-1	371544.25	25967522.29	1119.5	1119.08	40	30	40
P-2	374164.12	25968133.77	1131.33	1131.08	38	28	38
PB-1	374966	25972100	1125	--	--	--	--
PB-2	373410	25969030	1121	--	--	--	--
PB-3	372900	25968475	1115	--	--	--	--
PB-4	372750	25968068	1119	--	--	--	--
PB-5	373356	25968920	1120	--	--	--	--
PB-6	372560	25968040	1120	--	--	--	--
SB-1	373440	25968680	1119	--	--	--	--
SB-1B	373440	25968680	1119	--	--	--	--
SB-2	373360	25968650	1119	--	--	--	--
SB-2B	373360	25968650	1119	--	--	--	--
SB-3	373208	25968900	1119	--	--	--	--
SB-4	373120	25969150	1120	--	--	--	--
SB-5	373140	25969040	1118	--	--	--	--
SB-6	373178	25968660	1118	--	--	--	--
SB-6B	373178	25968660	1118	--	--	--	--
SB-7	373020	25968964	1118	--	--	--	--
SB-8	372940	25968600	1115	--	--	--	--
SB-9	372926	25968500	1115	--	--	--	--
SB-10	372610	25968040	1120	--	--	--	--
SB-10B	372610	25968040	1120	--	--	--	--
SB-11	372740	25968078	1119	--	--	--	--
SB-11B	372740	25968078	1119	--	--	--	--
SB-12	372520	25967980	1120	--	--	--	--
SB-13	372436	25967840	1120	--	--	--	--
SB-21	372490	25967960	1120	--	--	--	--
SB-22	372900	25968560	1113	--	--	--	--
SB-23	373080	25969024	1118	--	--	--	--
SB-32	372770	25968068	1120	--	--	--	--
SB-33	372910	25968040	1120	--	--	--	--
SB-96-1	373450	25969040	1120	--	--	--	--
SB-96-2	373365	25968820	1119	--	--	--	--
SB-96-3	373270	25969150	1120	--	--	--	--
SB-96-4	373215	25968880	1119	--	--	--	--
SB-96-5	373215	25968680	1119	--	--	--	--

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Table 3-1. Summary of Soil Borings, Monitoring Wells, Test Pits and Staff Gauges, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Northing (ft)	Easting (ft)	Ground Elevation (ft)	TOC Elevation (ft msl)	Total Depth (ft bls)	Top of Screen Depth (ft bls)	Bottom of Screen Depth (ft bls)
SB-96-6	373303	25968690	1119	--	--	--	--
SB-96-7	373490	25969320	1120	--	--	--	--
SB-96-8	373705	25967960	1120	--	--	--	--
SB-96-9	373430	25967930	1120	--	--	--	--
SCTP-1	373261.51	25969871.34	--	--	--	--	--
SCTP-2	373262	25969912	--	--	--	--	--
SCTP-3	373262	25969969	--	--	--	--	--
SCTP-4	373262	25969829	--	--	--	--	--

Northing and Easting are in feet relative to the Michgian State Plane System.

--	Not available or not applicable.
ft	Feet.
ft bls	Feet below land surface.
ft msl	Feet mean sea level.
TOC	Top of Casing.

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Table 4-1. Summary of Hyraulic Testing Prior to Treatment System Construction, Ford-Kingsford Products Facility, Kingsford, Michigan.

Pumping Well	Observation Well	Type of Test	Date of Test	Distance to Pumping Well (ft)	Pumping Rate (gpm)	Drawdown Duration of Test (hh:mm)	Drawdown T (ft2/d)	Recovery Duration of Test (hh:mm)	Recovery T (ft2/d)
Zone A Sands									
GMEW-1	--	Step	8/3/00	--	15/25/35	07:08	780	--	--
GMEW-2	GMPZ-2	Pump	10/21/01	50	20	72:32	3,710	22:32	--
GMEW-2	GMPZ-3	Pump	10/21/01	100	20	72:32	3,120	22:32	--
GMEW-5	GMPZ-5	Pump	12/3/02	15	10	09:13	4,690	01:00	1,980
GMEW-6	GMPZ-6	Pump	7/25/02	16	10	47:12	4,540	35:41	3,150
Zone B Sands									
GMEW-4	GM-25B	Step	2/13/02	16	5/10/15	06:55	260	--	110
GMEW-4R	GM-25B	Step	12/4/02	8	5/10	05:13	200	--	110
Zone C Sands									
GMEW-3	GM-65	Pump	10/29/03	10	25	48:40	2,440	21:26	--
GMEW-3	GMPZ-10	Pump	10/29/03	18	25	48:40	2,640	21:26	--
GMEW-7	GMPZ-7	Pump	11/21/03	10	23	48:04	1,770	23:01	--
GMEW-8	GMPZ-8	Pump	11/4/03	10	25	48:04	1,560	24:39	--
GMEW-9	GMPZ-9	Pump	12/3/03	11	20	30:08	3,100	33:30	--

d	Day.
ft	Feet.
gpm	Gallons per minute.
hh	Hours.
mm	Minutes.
T	Transmissivity.

Table 4-2. Summary of Short-Term Hydraulic Testing on Extraction Wells, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well ID	Date	SWL (ft BTOC)	Test Duration (hrs)	Max Drawdown (ft)	Flow Rate (gpm)	Total Pumped (gal)	Specific Capacity
GMEWA-1	10/10/04	15.83	4	2.14	15	3,787	7.0
GMEWA-2	10/11/04	15.80	4	2.50	15	3,580	6.0
GMEWA-3	10/19/04	15.56	4	5.25	10	2,483	
GMEWA-4	10/12/04	12.32	4	4.45	15	3,775	3.4
GMEWA-5	09/25/04	6.00	4	2.81	15	3,626	5.3
GMEWA-6	09/26/04	8.29	4	6.62	15	3,577	2.3
GMEWA-7	09/27/04	4.75	4	2.36	15	3,583	6.4
GMEWA-8	09/28/04	5.30	4	1.10	15	3,563	13.6
GMEWA-9	10/04/04	6.09	4	0.87	15	3,750	17.2
GMEWA-10	10/05/04	6.31	4	0.54	15	3,750	27.8
GMEWA-11	10/06/04	9.01	4	0.77	15	3,801	19.5
GMEWA-12	10/07/04	10.36	4	3.49	15	3,554	4.3
GMEWA-13	10/08/04	10.15	4	1.84	15	3,671	8.2
GMEWA-14	10/09/04	10.47	4	1.37	15	3,731	10.9
GMEWA-15	09/11/04	11.99	4	1.49	15	3,633	10.1
GMEWA-16	09/12/04	12.65	4	1.37	15	3,666	10.9
GMEWA-17	09/13/04	12.91	4	1.82	15	3,580	8.2
GMEWA-18	09/14/04	13.74	4	2.34	15	3,582	6.4
GMEWA-19	11/17/04	13.68	2.3	5.23	5	773	1.0
GMEWA-20	09/20/04	14.17	< 1	3.09	15	710	4.9
GMEWA-20	09/20/04	14.20	3.2	2.48	10	1,892	4.0
GMEWA-21	11/18/04	14.30	4	6.30	10	781	1.6
GMEWA-22	09/21/04	15.83	4	4.77	15	3,574	3.1
GMEWA-23	09/22/04	14.89	4	1.58	15	3,588	9.5
GMEWA-24	09/23/04	12.15	4	1.25	15	3,585	12.0
GMEWA-25	09/24/04	14.41	4	2.31	15	3,591	6.5
GMEWA-26	10/28/04	13.90	4	2.47	15	3,644	6.1
GMEWA-27	10/31/04	11.62	4	1.71	15	3,641	8.8
GMEWA-28	11/01/04	12.94	4	1.98	15	3,819	7.6
GMEWA-28A	11/02/04	14.10	4	1.32	15	3,618	11.4
GMEWB-1	11/13/04	13.59	0.4	81.60	10	259	0.1
GMEWC-1	09/04/04	5.43	4	5.30	30	7,228	5.7
GMEWC-1A	09/08/04	7.50	4	4.07	30	7,178	7.4

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Table 4-2. Summary of Short-Term Hydraulic Testing on Extraction Wells, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well ID	Date	SWL (ft BTOC)	Test Duration (hrs)	Max Drawdown (ft)	Flow Rate (gpm)	Total Pumped (gal)	Specific Capacity
GMEWC-2	09/02/04	6.21	4	11.10	30	7,148	2.7
GMEWC-2A	11/15/04	6.93	4	9.23	30	7,184	3.3
GMEWC-3	09/01/04	9.31	4	6.40	30	7,099	4.7
GMEWC-5	08/31/04	12.30	4	27.45	30	7,081	1.1
GMEWC-6	11/12/04	11.32	1.4	90.29	30	2,581	0.3
GMEWC-7	09/09/04	13.23	4	23.19	30	7,155	1.3
GMEWC-7A	11/14/04	13.50	4	65.32	30	7,371	0.5
GMEWC-8	09/10/04	11.32	4	12.40	30	7,148	2.4
GMEWC-8A	11/16/04	11.45	4	9.07	30	7,312	3.3
GMEWC-9	11/11/04	12.38	4	79.91	20	5,275	0.3
GMEWC-10	11/10/04	12.26	4	102.07	26	6,250	0.3

ft	Feet.
ft BTOC	Feet below top of casing.
hrs	Hours.
gal	Gallons.
gpm	Gallons per minute.
SWL	Static Water Level.

Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
BR-2	06/29/97	X	X	X	X	X			X		X	X		
BR-3	06/28/97	X	X	X	X	X			X		X	X		
BR-5A	07/01/97	X	X	X	X	X			X		X	X		
BR-5B	07/01/97	X	X	X	X	X			X		X	X		
BR-6	06/29/97	X	X	X	X	X			X		X	X		
CW-1	10/14/97	X	X	X	X	X			X		X	X		
CW-1	10/22/98	X	X	X		X	X	X	X	X	X	X	X	
CW-1	04/29/99	X	X	X		X	X	X	X	X	X	X	X	
GM-1	06/24/97	X	X	X	X	X			X		X	X		
GM-1	10/09/97	X	X	X	X	X			X		X	X		
GM-1	10/07/98	X	X	X		X	X	X	X	X	X	X	X	
GM-1	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-1	04/28/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-2A	07/02/97	X	X	X	X	X			X		X	X		
GM-2A	10/12/97	X	X	X	X	X			X		X	X		
GM-2B	06/26/97	X	X	X	X	X			X		X	X		
GM-2B	10/21/97	X	X	X	X	X			X		X	X		
GM-2B	12/11/97	X	X	X	X	X			X		X			
GM-2B	11/22/98	X	X	X		X	X	X	X	X	X	X	X	
GM-2B	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-2B	05/25/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-2C	11/06/98	X	X	X		X	X	X	X	X	X	X	X	
GM-2C	04/13/99	X	X	X		X	X		X	X	X		X	
GM-2C	05/04/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-3A	06/25/97	X	X	X	X	X			X		X			
GM-3A	10/10/97	X	X	X	X	X			X		X	X		
GM-3A	10/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-3A	04/13/99	X	X	X		X	X	X	X	X	X	X	X	
GM-3A	05/05/04	X	X	X	X	X	X	X	X	X	X		X	
GM-3A	05/11/04											X		
GM-3B	06/26/97	X	X	X	X	X			X		X	X		
GM-3B	10/14/97	X	X	X	X	X			X		X	X		
GM-3B	10/08/98	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-3B	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-3B	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-3B	05/11/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-4	06/26/97	X	X	X	X	X			X		X	X		
GM-4	10/14/97	X	X	X	X	X			X		X	X		
GM-4	10/20/98	X	X	X		X	X	X	X	X	X	X	X	
GM-4	04/21/99	X	X	X		X	X	X	X	X	X	X	X	
GM-4	05/01/04								X					
GM-4	05/02/04								X					
GM-4	05/22/04											X		
GM-4	01/08/07	X										X		
GM-5	07/02/97	X	X	X	X	X			X		X	X		
GM-5	10/15/97	X	X	X	X	X			X		X	X		
GM-5	04/18/99	X	X	X		X	X	X	X	X	X	X	X	
GM-5	11/30/99		X	X	X	X		X					X	X
GM-5	08/15/00		X	X		X								X
GM-5	09/20/00		X		X	X								X
GM-6	06/28/97	X	X	X	X	X			X		X	X		
GM-6	10/22/97	X	X	X	X	X			X		X	X		
GM-6	10/10/98	X	X	X		X	X	X	X	X	X	X	X	
GM-6	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-6	02/29/00		X		X	X								X
GM-6	07/19/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-6	09/25/00		X		X	X								X
GM-7	06/29/97	X	X	X	X	X			X		X	X		
GM-7	10/11/97	X	X	X	X	X			X		X	X		
GM-7	10/23/98	X	X	X		X	X	X	X	X	X	X	X	
GM-7	05/01/99	X	X	X		X	X	X	X	X	X	X	X	
GM-7	09/23/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-7	05/03/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-8	06/30/97	X	X	X	X	X			X		X	X		
GM-8	10/12/97	X	X	X	X	X			X		X	X		
GM-8	10/09/98	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-8	04/13/99	X	X	X		X	X	X	X	X	X	X	X	
GM-8	10/21/99	X	X	X		X	X	X	X	X	X	X	X	X
GM-9	10/13/97	X	X	X	X	X			X		X	X		
GM-9	10/11/98	X	X	X		X	X	X	X	X	X	X	X	
GM-9	04/18/99	X	X	X		X	X	X	X	X	X	X	X	
GM-9	03/07/00													X
GM-9	09/10/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-9	05/03/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-9	07/28/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-10	10/14/97	X	X	X	X	X			X		X	X		
GM-10	11/06/98	X	X	X		X	X	X	X	X	X	X	X	
GM-10	04/27/99	X	X	X		X	X	X	X	X	X	X	X	
GM-11	10/15/97	X	X	X	X	X			X		X	X		
GM-12	10/22/97	X	X	X	X	X			X		X	X		
GM-12	10/10/98	X	X	X		X	X	X	X	X	X	X		
GM-12	10/11/98												X	
GM-12	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-13	10/21/97	X	X	X	X	X			X		X	X		
GM-13	04/20/99	X	X	X		X	X	X	X	X	X	X	X	
GM-13	05/18/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-14	10/21/97	X	X	X	X	X			X		X	X		
GM-14	10/23/98											X		
GM-14	10/28/98	X	X	X		X	X	X	X	X	X	X	X	
GM-14	05/02/99	X	X	X		X	X	X	X	X	X	X	X	
GM-15	10/20/97	X	X	X	X	X			X		X	X		
GM-15	10/11/98	X	X	X		X	X	X	X	X	X	X	X	
GM-15	04/20/99	X	X	X		X	X	X	X	X	X	X	X	
GM-15	05/10/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-16	10/22/97	X	X	X	X	X			X		X	X		
GM-16	10/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-16	04/14/99	X	X	X		X	X	X	X	X	X	X	X	
GM-16	09/23/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-16	04/27/04	X	X	X	X	X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-17	10/28/97	X	X	X	X	X			X		X	X		
GM-17	10/12/98	X	X	X		X	X	X	X	X	X	X	X	
GM-17	04/26/99	X	X	X		X	X	X	X	X	X	X	X	
GM-17	05/01/04								X					
GM-17	05/16/04											X		
GM-18	12/04/97	X	X	X	X	X			X		X	X		
GM-18	11/07/98	X	X	X		X	X	X	X	X	X	X		
GM-19	12/04/97	X		X	X	X			X		X	X		
GM-19	12/11/97		X											
GM-20	12/05/97	X	X	X	X	X			X		X			
GM-21	12/03/97	X	X	X	X	X			X		X	X		
GM-21	12/03/97	X	X	X	X	X			X		X	X		
GM-21	10/13/98	X	X	X		X	X	X	X	X	X	X	X	
GM-21	01/29/01	X	X	X	X									
GM-21	09/09/05	X	X	X	X									
GM-22	12/05/97	X	X	X	X	X			X		X	X		
GM-22	10/10/98	X	X	X		X	X	X	X	X	X	X	X	
GM-22	04/13/99	X	X	X		X	X	X	X	X	X	X	X	
GM-22	01/15/01	X	X	X	X									
GM-22	09/08/05	X	X	X	X									
GM-23	12/03/97	X	X	X	X	X			X		X	X		
GM-23	10/10/98	X	X	X		X	X	X	X	X	X	X	X	
GM-23	01/16/01	X	X	X	X									
GM-23	05/12/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-23	09/08/05	X	X	X	X									
GM-24A	11/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-24A	05/04/99	X	X	X		X	X	X	X	X	X	X	X	
GM-24B	11/17/98	X	X	X		X	X	X	X	X	X	X	X	
GM-24B	05/05/99	X	X	X		X	X	X	X	X	X	X	X	
GM-24B	04/29/04	X	X	X	X	X	X		X	X	X		X	
GM-24B	05/04/04					X		X				X		
GM-24C	11/20/98	X	X	X		X	X	X	X	X	X	X	X	
GM-24C	05/13/99	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-24C	09/24/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-24C	04/29/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25A	10/06/98	X	X	X		X	X	X	X	X	X	X	X	
GM-25A	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-25A	12/01/99		X	X		X		X					X	X
GM-25A	08/21/00		X		X	X								X
GM-25A	08/25/03													X
GM-25A	09/09/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25A	05/12/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25B	10/06/98	X	X	X		X	X	X	X	X	X	X	X	
GM-25B	04/27/99	X	X	X		X	X	X	X	X	X	X	X	
GM-25B	07/13/99													X
GM-25B	08/25/99													X
GM-25B	10/20/99	X	X	X		X	X	X	X	X	X	X	X	X
GM-25B	04/17/00			X	X	X								
GM-25B	09/09/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25B	05/18/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25C	10/26/98												X	
GM-25C	11/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-25C	04/20/99	X	X	X		X	X	X	X	X	X	X	X	
GM-25C	08/02/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-25C	09/15/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25C	05/04/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-25C	08/01/05	X		X	X	X	X	X	X	X	X	X	X	
GM-26A	10/07/98	X	X	X		X	X	X	X		X	X	X	
GM-26A	04/14/99	X	X	X		X	X	X	X	X	X	X	X	
GM-26A	11/29/99		X	X	X	X		X					X	X
GM-26A	08/16/00		X		X	X								X
GM-26A	09/02/03													X
GM-26A	09/09/03	X	X	X	X	X	X	X	X	X	X		X	
GM-26A	05/13/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-26B	10/07/98	X	X	X		X	X	X	X	X	X	X	X	
GM-26B	04/15/99	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-26B	11/30/99		X	X	X	X		X					X	X
GM-26B	07/18/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-26B	09/09/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-26B	04/27/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-26B	07/28/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-26C	10/25/98	X	X	X		X	X	X	X	X	X	X	X	
GM-26C	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-26C	11/30/99		X	X	X	X		X					X	X
GM-26C	08/16/00		X		X	X								X
GM-26C	09/03/03													X
GM-26C	09/16/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-26C	05/18/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27A	10/08/98	X	X	X		X	X	X	X	X	X	X	X	
GM-27A	04/15/99	X	X	X		X	X	X	X	X	X	X	X	
GM-27A	12/01/99		X	X		X		X					X	X
GM-27A	08/25/03													X
GM-27A	09/10/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27A	05/13/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27B	10/26/98	X	X	X		X	X	X	X	X	X	X	X	
GM-27B	04/14/99	X	X	X		X	X	X	X	X	X	X	X	
GM-27B	07/18/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-27B	09/10/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27B	04/30/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27B	08/05/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27B	12/7/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27C	11/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-27C	12/02/98	X												
GM-27C	04/26/99	X	X	X		X	X	X	X	X	X	X	X	
GM-27C	08/07/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-27C	09/11/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27C	04/30/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-27C	08/05/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28A	10/28/98	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-28A	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-28A	02/29/00		X		X	X								X
GM-28A	07/19/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-28A	04/28/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28A	07/26/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28A	12/5/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28B	10/24/98											X		
GM-28B	10/26/98												X	
GM-28B	11/08/98	X	X	X		X	X	X	X	X	X	X	X	
GM-28B	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-28B	03/01/00		X		X	X								X
GM-28B	04/28/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28B	07/26/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-28B	12/5/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-29	10/09/98	X	X	X		X	X	X	X	X	X	X	X	
GM-29	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-29	02/29/00		X		X	X								X
GM-29	09/10/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-29	05/03/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-29	07/28/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-29	12/8/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-30	10/27/98	X	X	X		X	X	X	X	X	X	X	X	
GM-30	05/12/99	X	X	X		X	X	X	X	X	X	X	X	
GM-31	10/24/98	X	X	X		X	X	X	X	X	X	X	X	
GM-31	05/03/99	X	X	X		X	X	X	X	X	X	X	X	
GM-31	10/09/00		X		X	X								X
GM-32	10/25/98	X	X	X		X	X	X	X	X	X	X	X	
GM-32	04/27/99	X	X	X		X	X	X	X	X	X	X	X	
GM-32	09/25/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-32	05/26/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-33	12/03/98	X	X											
GM-33	05/10/99	X	X	X		X	X	X	X	X	X		X	
GM-34A	10/08/98	X	X	X		X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-34A	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-34A	04/29/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-34B	10/11/98	X	X	X		X	X	X	X	X	X	X	X	
GM-34B	04/15/99	X	X	X		X	X	X	X	X	X	X	X	
GM-34B	09/24/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-34B	04/28/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-35	11/04/98	X	X	X		X	X	X	X	X	X	X	X	
GM-35	05/04/99	X	X	X		X	X	X	X	X	X	X	X	
GM-36	11/03/98	X	X	X		X	X	X	X	X	X	X	X	
GM-36	05/05/99	X	X	X		X	X	X	X	X	X	X	X	
GM-36	05/04/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-37A	11/18/98	X	X	X		X	X	X	X	X	X	X	X	
GM-37A	05/11/99	X	X	X		X	X	X	X	X	X		X	
GM-37A	09/25/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-37A	05/17/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-37B	10/13/98	X	X	X		X	X	X	X	X	X		X	
GM-37B	05/14/99	X	X	X		X	X	X	X	X	X	X	X	
GM-37B	09/25/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-37B	05/27/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-38A	10/13/98	X	X	X		X	X	X	X	X	X	X	X	
GM-38A	04/15/99	X	X	X		X	X	X	X	X	X	X	X	
GM-38B	10/14/98	X	X	X		X	X	X	X	X	X	X	X	
GM-38B	04/29/99	X	X	X		X	X	X	X	X	X	X	X	
GM-38C	10/20/98	X	X	X		X	X	X	X	X	X	X	X	
GM-38C	04/30/99	X	X	X		X	X	X	X	X	X	X	X	
GM-39	10/11/98	X	X	X		X	X	X	X	X	X	X	X	
GM-39	04/15/99	X	X	X		X	X	X	X	X	X	X	X	
GM-40A	10/26/98	X	X	X		X	X	X	X	X	X	X	X	
GM-40A	04/28/99	X	X	X		X	X	X	X	X	X	X	X	
GM-40A	05/03/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-40B	10/26/98	X	X	X		X	X	X	X	X	X	X	X	
GM-40B	04/27/99	X	X	X		X	X	X	X	X	X	X	X	
GM-40B	05/19/04	X	X	X	X	X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-41	10/19/98	X	X	X		X	X	X	X	X	X	X	X	
GM-41	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-42	10/20/98	X	X	X		X	X	X	X	X	X	X	X	
GM-42	04/16/99	X	X	X		X	X	X	X	X	X	X	X	
GM-49	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-50	10/14/98	X	X	X		X	X	X	X	X	X	X	X	
GM-50	04/17/99	X	X	X		X	X	X	X	X	X	X	X	
GM-51	10/20/98	X	X	X		X	X	X	X	X	X	X	X	
GM-51	04/18/99	X	X	X		X	X	X	X	X	X	X	X	
GM-52	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-53A	04/19/99	X	X	X		X	X	X	X	X	X	X	X	
GM-53B	11/05/98	X	X	X		X	X	X	X	X	X	X	X	
GM-53B	05/01/99	X	X	X		X	X	X	X	X	X	X	X	
GM-54	10/26/98	X	X	X		X	X	X	X	X	X	X	X	
GM-54	05/01/99	X	X	X		X	X	X	X	X	X	X	X	
GM-55	10/24/98	X	X	X		X	X	X	X	X	X	X	X	
GM-55	05/01/99	X	X	X		X	X	X	X	X	X	X	X	
GM-55	05/01/99	X	X	X		X	X	X	X	X	X	X	X	
GM-56	10/21/98	X	X	X		X	X	X	X	X	X	X		
GM-56	10/24/98												X	
GM-56	04/20/99	X	X	X		X	X	X	X	X	X	X	X	
GM-57	04/20/99	X	X	X		X	X	X	X	X	X	X	X	
GM-58	04/26/99	X	X	X		X	X	X	X	X	X	X	X	
GM-58	05/22/04											X		
GM-59	11/17/98	X	X	X		X	X	X	X	X	X	X	X	
GM-59	04/28/99	X	X	X		X	X	X	X	X	X	X	X	
GM-59	05/01/04								X					
GM-59	05/15/04											X		
GM-59	05/22/04											X		
GM-59	07/29/05											X		
GM-60	05/12/99	X	X	X		X	X	X	X	X	X		X	
GM-61	05/03/99	X	X	X		X	X	X	X	X	X	X	X	
GM-61	05/01/04								X					

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-61	05/16/04											X		
GM-61	07/30/05											X		
GM-62A	08/23/99	X	X	X		X	X	X	X	X	X	X	X	
GM-62A	05/11/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-62B	08/24/99	X	X	X		X	X	X	X	X	X	X	X	
GM-62B	05/19/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-62C	08/24/99	X	X	X		X	X	X	X	X	X	X	X	
GM-62C	05/18/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-63A	08/29/00	X	X		X	X	X	X	X	X	X			
GM-63A	09/19/00	X	X		X	X	X	X	X	X	X		X	
GM-63A	10/18/00											X		
GM-63A	09/15/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-63A	05/05/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-63B	02/07/01	X	X	X	X	X	X	X	X	X	X	X	X	
GM-63B	09/11/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-63B	04/27/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-64A	08/30/00	X	X		X	X	X	X	X	X	X	X		
GM-64A	10/03/00	X	X		X	X	X	X	X	X	X		X	X
GM-64A	10/19/00											X		
GM-64A	09/08/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-64A	05/04/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-64B	07/24/00	X	X		X	X	X	X	X	X	X		X	X
GM-64B	10/04/00		X		X	X								X
GM-64B	09/08/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-64B	05/11/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66A	07/18/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-66A	09/16/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66A	04/27/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66A	07/27/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66B	07/19/00	X	X		X	X	X	X	X	X	X	X	X	X
GM-66B	08/03/00	X	X		X	X	X	X	X	X	X	X	X	
GM-66B	09/11/03	X	X	X	X	X	X		X	X	X	X	X	
GM-66B	09/11/03					X		X						

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-66B	05/10/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66B	07/27/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-66B	12/8/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-67	08/07/00	X	X	X		X	X	X	X	X	X	X	X	
GM-67	05/01/04								X					
GM-67	05/17/04											X		
GM-68	08/31/00	X	X		X	X	X	X	X	X	X			
GM-68	09/26/00	X	X		X	X	X	X	X	X	X		X	
GM-68	10/17/00											X		
GM-68	05/24/04											X		
GM-68	07/31/05											X		
GM-70	08/17/00	X	X		X	X	X	X	X	X	X	X	X	
GM-71	08/21/00	X	X		X	X	X	X	X	X	X	X	X	
GM-72	08/22/00	X	X		X	X	X	X	X	X	X	X	X	
GM-72	09/24/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-72	01/05/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-72	04/16/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-72A	07/25/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-72A	12/12/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-73	09/06/00					X		X					X	
GM-73	09/06/00	X	X		X	X	X		X	X	X	X		
GM-74	09/07/00	X	X		X	X	X	X	X	X	X	X	X	
GM-75	09/08/00											X		
GM-75	09/08/00	X	X		X	X	X	X	X	X	X		X	
GM-76	01/29/01	X	X	X	X									
GM-76	09/09/05	X	X	X	X									
GM-77	09/22/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-77	10/06/03													X
GM-77	05/11/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-77	07/28/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-78	09/18/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-78	10/06/03													X
GM-78	04/29/04	X	X	X	X	X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GM-78	07/29/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-78	12/8/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-79	09/18/03	X	X	X	X	X	X	X	X	X	X	X	X	
GM-79	10/06/03													X
GM-79	04/26/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-79	07/29/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-79	12/4/2006	X	X	X	X	X	X	X	X	X	X	X	X	
GM-80	05/03/04											X		
GM-82A	06/02/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-82A	06/05/04	X	X	X	X	X	X	X	X	X	X	X	X	
GM-84	08/19/04	X	X	X	X	X	X	X	X	X	X		X	
GM-84	08/26/04											X		
GM-84	08/01/05	X	X	X	X	X	X	X	X	X	X	X	X	
GM-84	12/12/06	X	X	X	X	X	X	X	X	X	X	X	X	
GM-85	09/01/04											X		
GM-85	07/31/05											X		
GM-87A	12/12/06	X	X	X	X	X	X	X	X	X	X	X	X	
GM-87B	12/12/06	X	X	X	X	X	X	X	X	X	X	X	X	
GM-118D	10/21/98	X	X	X		X	X	X	X	X	X	X	X	
GM-118D	04/29/99	X	X	X		X	X	X	X	X	X	X	X	
GMSB-111	08/19/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-112	09/03/03	X	X	X	X	X	X	X	X	X	X		X	
GMSB-112	09/03/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-113	09/05/03	X	X	X	X	X	X		X	X	X	X	X	
GMSB-113	09/05/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-113	09/04/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-116	08/12/03	X	X	X	X	X	X	X	X	X	X		X	
GMSB-116	08/11/03	X	X	X	X	X	X	X	X	X	X		X	
GMSB-117	08/14/03	X	X	X	X	X	X	X	X	X	X		X	
GMSB-117	08/15/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-118	08/16/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-119	08/18/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-119	08/17/03	X	X	X	X	X	X	X	X	X	X	X	X	

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
GMSB-122	09/08/03	X	X	X	X	X	X	X	X	X	X	X	X	
GMSB-123	09/09/03	X	X	X	X	X	X	X	X	X	X	X	X	
Grailer	05/12/99		X									X		
Grailer	08/07/03	X	X									X		
Hambel	05/01/99		X											
Hambel	08/06/03	X	X									X		
Krans	05/01/99		X											
Krans	08/06/03	X	X									X		
Michaud	05/01/99		X											
Michaud	08/06/03	X	X									X		
Schnieder	05/01/99		X									X		
Schnieder	08/07/03	X	X											
Schnieder	08/07/03											X		
MPMW-4	02/26/02	X	X	X		X	X		X	X	X	X	X	
MW-1B	06/27/97	X	X	X	X	X			X		X	X		
MW-2B	06/28/97	X	X	X	X	X			X		X	X		
MW-5	10/22/98	X	X	X		X	X	X	X	X	X	X	X	
MW-5	04/18/99											X		
MW-5	04/30/99	X	X	X		X	X	X	X	X	X		X	
MW-8	06/29/97	X	X	X	X	X			X		X	X		
MW-8	10/24/98	X	X	X		X	X	X	X	X	X	X	X	
MW-8	05/03/99	X	X	X		X	X	X	X	X	X	X	X	
MW-8	05/12/04	X	X	X	X	X	X	X	X	X	X	X	X	
MW-9A	07/02/97	X	X	X	X	X			X		X			
MW-9B	07/02/97											X		
MW-10	06/30/97			X	X	X			X		X	X		
UG-1	05/21/04											X		
UG-1	07/31/05											X		
UG-2	07/01/97			X	X	X			X		X	X		
UG-2	10/27/98	X	X	X		X	X	X	X	X	X	X	X	
UG-2	05/03/99	X	X	X		X	X	X	X	X	X	X	X	
UG-3	05/10/04											X		
UG-3	08/02/05											X		

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Table 4-3. Summary of Groundwater Samples and Analyses, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/ Boring	Sample I.D.	VOCs	SVOCs	Metals	Dissolved Metals	Inorganics	Alcohols	Aldehydes	TOC	BOD	COD	Dissolved Gas	Organic Volatile Acids	Whole Effluent Toxicity
UG-4	10/13/97	X	X	X	X	X			X		X	X		
UG-4	10/23/98	X	X	X		X	X	X	X	X	X	X	X	
UG-4	05/02/99	X	X	X		X	X	X	X	X	X	X	X	
UG-5	05/22/04											X		
UG-5	08/03/05											X		
UG-6	10/21/97	X	X	X	X	X			X		X	X		

BOD Biological oxygen demand.
COD Chemical oxygen demand.
SVOCs Semi-volatile organic compounds.
TOD Total organic carbon.
VOCs Volatile organic compounds.

Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
VOCs		
1,1,1,2-Tetrachloroethane	8260B	1
1,1,1-Trichloroethane	8260B	1
1,1,2,2-Tetrachloroethane	8260B	1
1,1,2-Trichloroethane	8260B	1
1,1-Dichloroethane	8260B	1
1,1-Dichloroethene	8260B	1
1,2,3-Trichloropropane	8260B	5
1,2,4-Trimethylbenzene	8260B	1
1,2-Dibromo-3-chloropropane	8260B	5
1,2-Dibromoethane	8260B	1
1,2-Dichloroethane	8260B	1
1,2-Dichloroethene, total	8260B	2
1,2-Dichloropropane	8260B	1
1,3,5-Trimethylbenzene	8260B	1
1,3-Dichlorobenzene	8260B	1
1,4-Dichlorobenzene	8260B	1
2-Butanone (MEK)	8260B	50
2-Hexanone	8260B	50
4-Methyl-2-pentanone (MIBK)	8260B	50
Acetone	8260B	100
Acrylonitrile	8260B	25
Benzene	8260B	1
Bromochloromethane	8260B	1
Bromodichloromethane	8260B	1
Bromoform	8260B	1
Bromomethane	8260B	1
Carbon disulfide	8260B	5
Carbon tetrachloride	8260B	1
Chlorobenzene	8260B	1
Chloroethane	8260B	1
Chloroform	8260B	1
Chloromethane	8260B	1
cis-1,2-Dichloroethene	8260B	1
cis-1,3-Dichloropropene	8260B	1
Dibromochloromethane	8260B	1
Dibromomethane	8260B	1
Dichlorodifluoromethane	8260B	1
Diethylether	8260B	10
Ethylbenzene	8260B	1
Furan	8260B	10
Isopropylbenzene	8260B	1
Methyl (tert) butyl ether	8260B	5
Methyl iodide	8260B	5
Methylene chloride	8260B	1
n-Propylbenzene	8260B	1

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Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
VOCs (continued)		
Propionitrile	8260B	25
Styrene	8260B	1
Tetrachloroethene	8260B	1
Tetrahydrofuran	8260B	10
Toluene	8260B	1
trans-1,2-Dichloroethene	8260B	1
trans-1,3-Dichloropropene	8260B	1
trans-1,4-Dichloro-2-butene	8260B	5
Trichloroethene	8260B	1
Trichlorofluoromethane	8260B	1
Vinyl acetate	8260B	50
Vinyl chloride	8260B	1
Xylene (total)	8260B	3
Xylene,o	8260B	1
Xylene,m+p	8260B	2
SVOCs		
1,2,4-Trichlorobenzene	8270C	5
1,2-Dichlorobenzene	8270C	5
1,3-Dichlorobenzene	8270C	5
1,4-Dichlorobenzene	8270C	5
2,3-Dimethylphenol	8270C	10
2,4,5-Trichlorophenol	8270C	5
2,4,6-Trichlorophenol	8270C	5
2,4-Dichlorophenol	8270C	5
2,4-Dimethylphenol*	8270C	5
2,4-Dinitrophenol	8270C	20
2,4-Dinitrotoluene	8270C	5
2,5-Dimethylphenol*	8270C	10
2,5-Dinitrophenol	8270C	50
2,6-Dimethylphenol	8270C	10
2,6-Dinitrotoluene	8270C	5
2-Chloronaphthalene	8270C	5
2-Chlorophenol	8270C	5
2-Methylnaphthalene	8270C	5
2-Methylphenol	8270C	5
2-Nitroaniline	8270C	20
2-Nitrophenol	8270C	5
3,3'-Dichlorobenzidine	8270C	20
3,4-Dimethylphenol	8270C	10
3-Methylphenol*	8270C	10
4-Methylphenol*	8270C	10
3-Nitroaniline	8270C	20
3-Nitrophenol	8270C	10
4,6-Dinitro-2-methylphenol	8270C	20

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Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
SVOCs (continued)		
4-Bromophenyl-phenylether	8270C	5
4-Chloro-3-methylphenol	8270C	5
4-Chloroaniline	8270C	20
4-Chlorophenyl-phenylether	8270C	5
4-Nitroaniline	8270C	20
4-Nitrophenol	8270C	20
Acenaphthene	8270C	5
Acenaphthylene	8270C	5
Anthracene	8270C	5
Azobenzene	8270C	5
Benzo(a)anthracene	8270C	5
Benzo(a)pyrene	8270C	5
Benzo(b)fluoranthene	8270C	5
Benzo(g,h,i)perylene	8270C	5
Benzo(k)fluoranthene	8270C	5
bis(2-Chloroethoxy)methane	8270C	5
bis(2-Chloroethyl)ether	8270C	5
Bis-(2-Chloroisopropyl)ether	8270C	5
bis(2-Ethylhexyl)phthalate	8270C	5
Butylbenzylphthalate	8270C	5
Carbazole	8270C	5
Chrysene	8270C	5
Di-n-butyl phthalate	8270C	5
Di-n-octyl phthalate	8270C	5
Dibenzo(a,h)anthracene	8270C	5
Dibenzofuran	8270C	5
Diethyl phthalate	8270C	5
Dimethyl phthalate	8270C	5
Fluoranthane	8270C	5
Fluorene	8270C	5
Hexachlorobenzene	8270C	5
Hexachlorobutadiene	8270C	5
Hexachlorocyclopentadiene	8270C	5
Hexachloroethane	8270C	5
Indeno(1,2,3-c,d)pyrene	8270C	5
Isophorone	8270C	5
N-Nitrosodiphenylamine	8270C	5
Naphthalene	8270C	5
Nitrobenzene	8270C	5
Pentachlorophenol	8270C	20
Phenanthrene	8270C	5
Phenol	8270C	5
Pyrene	8270C	5

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Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
Alcohols		
1-Butanol	8015B	1,000
1-Propanol	8015B	1,000
1,4-Dioxane	8270C	5
2-Pentanone	8260B	1,000
2-Picoline	8270C	10
Acetonitrile	8260B	50
Acrolein	8260B	50
Allyl Alcohol	8260B	1,000
Ethanol	8015B	1,000
Ethyl Acetate	8015B	5,000
Ethylene Glycol	8015B	10,000
Ethylene Oxide	8260B	200
Isobutanol	8015B	1,000
Isopropanol	8015B	1,000
Methanol	8015B	1,000
n-Butanol	8015B	1
n-Nitroso-di-n-butylamine	8270C	5
n-Nitroso-di-n-propylamine	8270C	5
n-Propanol	8015B	1
o-Toluidine	8270C	5
Propanenitrile	8260B	25
Pyridine	8270C	20
t-Butyl Alcohol	8015B	1,000
Aldehydes		
** Acetaldehyde	8315A	100
** Butanal	8315A	100
** Crotonaldehyde	8315A	100
** Cyclohexanone	8315A	100
** Decanal	8315A	100
** Formaldehyde	8315A	100
** Heptanal	8315A	100
** Hexanal	8315A	100
** m-Tolualdehyde	8315A	100
** Nonanal	8315A	100
** Octanal	8315A	100
** Pentanal	8315A	100
** Propanal	8315A	100
**Paraldehyde	8015B	100
Metals		
Aluminum	6020	200
Antimony	6020	50

Footnotes on Page 6.

Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Parameter	Method Reference	Reporting Limits Groundwater (µg/L)
Metals (continued)		
Arsenic	6020	20
Barium	6020	100
Beryllium	6020	1
Cadmium	6020	0.5
Calcium	6020	100
Chromium	6020	5
Cobalt	6020	10
Copper	6020	25
Iron	6020	100
Lead	6020	3
Magnesium	6020	100
Manganese	6020	20
Mercury	U.S. EPA 7470A	0.2
Molybdenum	6020	10
Nickel	6020	25
Potassium	6020	250
Selenium	6020	5
Silver	6020	0.2
Sodium	6020	1,000
Thallium	6020	2
Titanium	6020	50
Vanadium	6020	20
Zinc	6020	20
Other Constituents		
Organic Volatile Acids	U.S. EPA 5560	50
Alkalinity	U.S EPA 310.1	1,000
Bicarbonate	4500-C02D	1
BOD	U.S EPA 405.1	2,000
Chloride	U.S. EPA 325.2	1,000
COD	U.S EPA 410.4	20,000
#Dissolved Methane	RSK 175	1.0
Hardness	6010	3,300
Nitrate	U.S. EPA 353.2	50
Nitrite	U.S. EPA 353.2	50
Nitrogen (ammonia)	U.S. EPA 350.1	30
Orthophosphate	U.S. EPA 365.2	50
Phosphate/Phosphorus	U.S. EPA 365.2/365.4	50/100
**Silica	SM 4500	500
Sulfate	U.S. EPA 375.4	5,000
Sulfide	U.S. EPA 376.1	1,000
Suspended Solids	U.S. EPA 160.2	5,000
Total Dissolved Solids	U.S. EPA 160.1	10,000
TOC (water)	U.S. EPA 415.1	1,000
Acetic Acid/Acetate	STL SOP	NA
Dioxins/Furans	U.S. EPA 1613	0.0000001 - 0.000001

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Table 4-4. Analytical Parameters, Analytical Methods, and Reporting Limits, Ford-Kingsford Products Facility, Kingsford, Michigan.

Practical quantitation limits per Savannah, TriMatrix, and Isotech Laboratories SOPs.

*	Compounds co-elute; therefore, the methylphenol and dimethylphenol isomers are reported as 3-methylphenol/4-methylphenol and 2,4-dimethylphenol/2,5-dimethylphenol, respectively.
**	Analysis to be performed by TriMatrix.
#	Analysis to be performed by Isotech.
BOD	Biological Oxygen Demand.
COD	Chemical Oxygen Demand.
µg/L	Micrograms per liter.
NA	Not applicable.
SVOCs	Semi-Volatile Organic Compounds.
TOC	Total Organic Carbon.
VOCs	Volatile Organic Compounds.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A	BR-5B		BR-6	CW-1			GM-1
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130	220
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99	06/24/97
Sample I.D.	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1	GWGM-1
Biochemical Oxygen Demand	NA	NA	NA	NA	NA	NA	NA	12 J	14	NA
Chemical Oxygen Demand	37	47	35	52	50	32	58	42	49	270
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2 J	4 J	6	12	13	<1 J	14	17	19	25

Results reported in milligrams per liter (mg/L).

< Less than detection limit.
-- Not applicable.
> A result is greater than the reported numerical value.
*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70 Received and analyzed outside hold time criteria per client request.
B Constituent was also detected in laboratory blank.
BOD Biological oxygen demand.
COD Chemical oxygen demand.
DOC Dissolved organic carbon.
ft bls Feet below land surface.
J Estimated results.
M Matrix interference reported by laboratory.
NA Not analyzed.
TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1 (continued)				GM-2A		GM-2B			
Top of Screen Depth (ft bls)	220	220	220	220	40	40	271	271	271	271
Sample Date	10/09/97	10/07/98	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97	12/11/97	11/22/98
Sample I.D.	GM-1	GWGM-1	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B	GM-2B	GWGM-2B
Biochemical Oxygen Demand	NA	42 J	18	33	NA	NA	NA	NA	NA	510 J
Chemical Oxygen Demand	310	250	<500 M	310	<10	200	3,100	3,600	2,400	1,700
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	55	84	11	84	2	1	9	460	590	640

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2B (continued)		GM-2C			GM-3A		
Top of Screen Depth (ft bls)	271	271	64	64	64	74	74	74
Sample Date	04/16/99	05/25/04	11/06/98	04/13/99	05/04/04	06/25/97	10/10/97	10/09/98
Sample I.D.	GWGM-2B	GWGM-2B(5/25/04)	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-3A	GM-3A	GWGM-3A
Biochemical Oxygen Demand	550	420	<2 J	3.7	<2.0	NA	NA	<2 J
Chemical Oxygen Demand	1,300	1,500	<10	<10	19 J	<10	20	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	53	430	1.5	1.8	<1.0	<2	1	<1

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3A (continued)		GM-3B					
Top of Screen Depth (ft bls)	74	74	170	170	170	170	170	170
Sample Date	04/13/99	05/05/04	06/26/97	10/14/97	10/08/98	04/17/99	04/17/99	05/11/04
Sample I.D.	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GM-3B	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)
Biochemical Oxygen Demand	<1.0	<2.0	NA	NA	38 J	30	27	27
Chemical Oxygen Demand	<10	<20	300	260	260	<500 M	<500 M	340
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.3	<1.0	73	59	81	90	84	96

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-4						GM-5		
Top of Screen Depth (ft bls)	76	76	76	76	76	76	250	250	250
Sample Date	06/26/97	10/14/97	10/20/98	04/21/99	05/01/04	05/02/04	07/02/97	10/15/97	04/18/99
Sample I.D.	GWGM-4	GM-4	GWGM-4	GWGM-4	GWGM-997 (5/1/04)	GWGM-4 (5/2/04)	GWGM-5	GM-5	GWGM-5
Biochemical Oxygen Demand	NA	NA	<2	<1.0	NA	NA	NA	NA	22
Chemical Oxygen Demand	<10	110	<10	<10	NA	NA	460	500	550
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1	<1	<1	<1	0.60 B	<1.0	130	110	140

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-6					GM-7					
Top of Screen Depth (ft bls)	165	165	165	165	165	145	145	145	145	145	145
Sample Date	06/28/97	10/22/97	10/10/98	04/19/99	07/19/00	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04
Sample I.D.	GWGM-6	GM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)
Biochemical Oxygen Demand	NA	NA	5.8 J	16	19	NA	NA	13 J	9.1	<2.0	<2.0
Chemical Oxygen Demand	190	150	130	<500 M	160 J	17	17	<10	14	33	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	57 J	44	47	43	47	4 J	4	4.3	4	1.9	0.76 B

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8					GM-9				
Top of Screen Depth (ft bls)	79	79	79	79	79	164	164	164	164	164
Sample Date	06/30/97	10/12/97	10/09/98	04/13/99	10/21/99	10/13/97	10/11/98	04/18/99	09/10/03	05/03/04
Sample I.D.	GWGM-8	GM-8	GWGM-8	GWGM-8	GM-8	GM-9	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)
Biochemical Oxygen Demand	NA	NA	<2 J	<1.0	<2.0	NA	<2 J	<1.0	<2.0	<2.0
Chemical Oxygen Demand	12	53	<10	100	<20	17	<10	15	<20	16 J
Dissolved Organic Carbon	NA	NA	NA	NA	<1.0	NA	NA	NA	NA	NA
Total Organic Carbon	1	<1	1	<1	<1.0	2	3.5	4.5	2.4	3.9

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-9 (continued)	GM-10			GM-11	GM-12			GM-13
Top of Screen Depth (ft bls)	164	170	170	170	174.7	290	290	290	325
Sample Date	07/28/05	10/14/97	11/06/98	04/27/99	10/15/97	10/22/97	10/10/98	04/19/99	10/22/97
Sample I.D.	GWGM-9 (072805)	GM-10	GWGM-10	GWGM-10	GM-11	GM-12	GWGM-12	GWGM-12	GM-13
Biochemical Oxygen Demand	<2.0	NA	<2 J	<1.0	NA	NA	<2 J	<1.0	NA
Chemical Oxygen Demand	6.6 J	<10	<10	<10	<10	<10	<10	<10	58
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	52	<1	1	1.2	<1	1	1.4	1.7	16

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-13 (continued)		GM-14			GM-15		
Top of Screen Depth (ft bls)	325	325	135	135	135	165	165	165
Sample Date	04/20/99	05/18/04	10/21/97	10/28/98	05/02/99	10/20/97	10/11/98	04/20/99
Sample I.D.	GWGM-13	GWGM-13 (5/18/04)	GM-14	GWGM-14	GWGM-14	GM-15	GWGM-15	GWGM-15
Biochemical Oxygen Demand	5.1	14	NA	3.6 J	7.4	NA	3.3 J	1.4
Chemical Oxygen Demand	1200	75	<10	<10	<10	26	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	23	20	3	3.6	5	2	2.9	2.8

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)		GM-16					
Top of Screen Depth (ft bls)	165	165	108	108	108	108	108	108
Sample Date	05/10/04	05/10/04	10/22/97	10/22/97	10/09/98	04/14/99	09/23/03	04/27/04
Sample I.D.	GWGM-15 (5/10/04)	GWGM-996 (5/10/04)	GM-16	GM-78	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)
Biochemical Oxygen Demand	<2.0	<2.0	NA	NA	<2 J	1.2	<2.0	<2.0
Chemical Oxygen Demand	<20	<20	<10	<10	<10	<10	<20	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2.7	2.6	<1	<1	<1	1	<1.0	0.75 B

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-17				GM-18		GM-19	GM-20	GM-21	
Top of Screen Depth (ft bls)	224.3	224.3	224.3	224.3	50	50	46	42	5	5
Sample Date	10/28/97	10/12/98	04/26/99	05/01/04	12/04/97	11/07/98	12/04/97	12/05/97	12/03/97	12/03/97
Sample I.D.	GM-17	GWGM-17	GWGM-17	GWGM-17 (5/1/04)	GM-18	GWGM-18	GM19	GM-20	GM-21	GM-95
Biochemical Oxygen Demand	NA	5.3 J	1.7	NA	NA	<2 J	NA	NA	NA	NA
Chemical Oxygen Demand	13	<10	<10	NA	<10	<10	<10	<140	<35	<26
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2	2.8	1.6	3	<1	<1	<1	9	7	7

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-21 (continued)	GM-22			GM-23		
Top of Screen Depth (ft bls)	5	6	6	6	3.5	3.5	3.5
Sample Date	10/13/98	12/05/97	10/10/98	04/13/99	12/03/97	10/10/98	05/12/04
Sample I.D.	GWGM-21	GM-22	GWGM-22	GWGM-22	GM-23	GWGM-23	GWGM-23 (5/12/04)
Biochemical Oxygen Demand	<2 J	NA	<2 J	1.5	NA	<2 J	<2.0
Chemical Oxygen Demand	17	<52	<10	35	220	<10	16 J
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	6.2	2	1.1	17	2	2.7	5.6

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-23 (continued)	GM-24A		GM-24B			
Top of Screen Depth (ft bls)	3.5	71	71	104	104	104	104
Sample Date	05/12/04	11/09/98	05/04/99	11/17/98	11/17/98	05/05/99	04/29/04
Sample I.D.	GWGM-995 (5/12/04)	GWGM-24A	GWGM-24A	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)
Biochemical Oxygen Demand	<2.0	2.6	3.6	<2	<2	1.4	<2.0
Chemical Oxygen Demand	19 J	<10	<10	13	<10	<10	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	5.7	2	<1	3.4	3.4	2.7	2.1

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C					GM-25A		
Top of Screen Depth (ft bls)	193	193	193	193	193	19	19	19
Sample Date	11/20/98	11/20/98	05/13/99	09/24/03	04/29/04	10/06/98	04/16/99	09/09/03
Sample I.D.	GWGM-24C	GWGM-93	GWGM-24C	GM-24C	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GM-25A
Biochemical Oxygen Demand	<2 J	<2 J	3.4	<2.0	<2.0	25 J	17	15
Chemical Oxygen Demand	<10	<10	<10	<20	<20	440	<500 M	280
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.4	1.5	2.7	2.2	<1.0	140	160	87

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25A (continued)	GM-25B						
Top of Screen Depth (ft bls)	19	98	98	98	98	98	98	98
Sample Date	05/12/04	10/06/98	04/27/99	10/20/99	09/09/03	05/18/04	05/31/06	07/17/06
Sample I.D.	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GM-25B	GM-25B	GWGM-25B (5/18/04)	GM-25B (5/31/06)	GM-25B
Biochemical Oxygen Demand	22	4,400 J	>250	3,600	3,600	4,000	NA	NA
Chemical Oxygen Demand	280	5,900	7,000	6,000	6,600	6,700	6,500	6,900
Dissolved Organic Carbon	NA	NA	NA	2,700	NA	NA	NA	NA
Total Organic Carbon	75	2,200	2,800	2,700	2,300	2,300	1,100	2,000

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

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Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C							GM-26A
Top of Screen Depth (ft bls)	206	206	206	206	206	206	206	30
Sample Date	11/09/98	11/09/98	04/20/99	08/02/00	09/15/03	05/04/04	08/01/05	10/07/98
Sample I.D.	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C	GM-25C	GWGM-25C (5/4/04)	GWGM-25C (08/01/05)	GWGM-26A
Biochemical Oxygen Demand	9.2	8.4	13	11	46	11	17	NA
Chemical Oxygen Demand	73	70	120	150 J	210	250	280	340 J
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	33	32	39	51	63	73	84	120

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A			GM-26B				
Top of Screen Depth (ft bls)	30	30	30	101	101	101	101	101
Sample Date	04/14/99	09/09/03	05/13/04	10/07/98	04/15/99	07/18/00	09/09/03	04/27/04
Sample I.D.	GWGM-26A	GM-26A	GWGM-26A (5/13/04)	GWGM-26B	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B (4/27/04)
Biochemical Oxygen Demand	30	21	42	7.2 J	<1.0	<2.0	<2.0	<2.0
Chemical Oxygen Demand	1,000	460	650	<10	<10	<20 J	<20	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	200	150	190	1	<1	<1.0	1	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B (continued)	GM-26C					GM-27A
Top of Screen Depth (ft bls)	101	160	160	160	160	160	30
Sample Date	07/28/05	10/25/98	04/17/99	09/16/03	05/18/04	05/18/04	10/08/98
Sample I.D.	GWGM-26B (072805)	GWGM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)	GWGM-994 (5/18/04)	GWGM-27A
Biochemical Oxygen Demand	<2.0	7.8 J	22	43	58	60	13 J
Chemical Oxygen Demand	<20	140	610	1,000	1,000	1,000	400
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	0.70 J	180	180	290	290	290	150

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)						GM-27B
Top of Screen Depth (ft bls)	30	30	30	30	30	30	145
Sample Date	04/15/99	09/10/03	05/13/04	04/24/06	05/26/06	07/14/06	10/26/98
Sample I.D.	GWGM-27A	GM-27A	GWGM-27A (5/13/04)	GM-27A (4/24/06)	GM-27A (5/26/06)	GM-27A	GWGM-27B
Biochemical Oxygen Demand	6.9	44	40	NA	NA	NA	8.9 J
Chemical Oxygen Demand	<500 M	610	550	360	350	290	13
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	200	160	160	98	98	92	5.5

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B (continued)					
Top of Screen Depth (ft bls)	145	145	145	145	145	145
Sample Date	04/14/99	07/18/00	09/10/03	04/30/04	04/30/04	08/05/05
Sample I.D.	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)	GWGM-998 (4/30/04)	GWGM-27B (08/05/05)
Biochemical Oxygen Demand	3.4	<2.0	<2.0	<2.0 *F70	<2.0 *F70	<2.0
Chemical Oxygen Demand	<10	<20 J	<20	<20	<20	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2.2	<1.0	<1.0	<1.0	<1.0	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B (continued)	GM-27C					
Top of Screen Depth (ft bls)	145	210	210	210	210	210	210
Sample Date	12/07/06	11/09/98	04/26/99	04/26/99	08/07/00	09/11/03	04/30/04
Sample I.D.	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C	GM-27C	GWGM-27C (4/30/04)
Biochemical Oxygen Demand	<2.0	<2 J	<1.0	<1.0	<2.0	<2.0	<2.0 *F70
Chemical Oxygen Demand	0	16	<10	<10	<20	<20	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1.0	<1	1.2	1.4	<1.0	1.2	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)	GM-28A				
Top of Screen Depth (ft bls)	210	40	40	40	40	40
Sample Date	08/05/05	10/28/98	04/19/99	07/19/00	04/28/04	07/26/05
Sample I.D.	GWGM-27C (08/05/05)	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)	GWGM28A (072605)
Biochemical Oxygen Demand	<2.0	16 J	19	<2.0	<2.0	<2.0
Chemical Oxygen Demand	<20	<10	<10	<20 J	19 J	25
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.3	1.6	1.5	2.6	2.9	3.6

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A (continued)		GM-28B				
Top of Screen Depth (ft bls)	40	40	124.5	124.5	124.5	124.5	124.5
Sample Date	07/26/05	12/05/06	11/08/98	11/08/98	04/19/99	04/19/99	04/28/04
Sample I.D.	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B (4/28/04)
Biochemical Oxygen Demand	<2.0	<2.0	<2	<2	<1.0	<1.0	<2.0
Chemical Oxygen Demand	14 J	31	<10	<10	<10	<10	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	3.8	0.93 J	<1	<1	<1	<1	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)			GM-29			
Top of Screen Depth (ft bls)	124.5	124.5	124.5	55	55	55	55
Sample Date	04/28/04	07/26/05	12/05/06	10/09/98	10/09/98	04/16/99	09/10/03
Sample I.D.	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GM-29
Biochemical Oxygen Demand	<2.0	<2.0	<2.0	16 J	14 J	13	<2.0
Chemical Oxygen Demand	<20	<20	0	17	90	73	21
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1.0	<1.0	0.60 J	29	30	28	10

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29 (continued)			GM-30			GM-31	
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105	105
Sample Date	05/03/04	07/28/05	12/08/06	10/27/98	05/12/99	05/12/99	10/24/98	05/03/99
Sample I.D.	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31	GWGM-31
Biochemical Oxygen Demand	<2.0	<2.0	2.7	10 J	5.6	5	2.6 J	3.9
Chemical Oxygen Demand	23	25	1	<10	<10	20	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	5.9	6.4	10	5.4	4	4.1	1	1.3

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-32				GM-33	GM-34A		
Top of Screen Depth (ft bls)	135	135	135	135	74	30	30	30
Sample Date	10/25/98	04/27/99	09/25/03	05/26/04	05/10/99	10/08/98	04/17/99	04/29/04
Sample I.D.	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-33	GWGM-34A	GWGM-34A	GWGM-34A (4/29/04)
Biochemical Oxygen Demand	2,500 GJ	>250	3,800	3,600	23	<2 J	1.1	<2.0
Chemical Oxygen Demand	9,200	11,000	7,700	6,500	16	<10	<10	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	3,100	4,300	3,000	2,100	<1	<1	1	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34B				GM-35			GM-36	
Top of Screen Depth (ft bls)	85	85	85	85	40	40	40	95	95
Sample Date	10/12/98	04/14/99	09/24/03	04/28/04	11/04/98	05/04/99	05/04/99	11/03/98	05/05/99
Sample I.D.	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-35	GWGM-35	GWGM-84	GWGM-36	GWGM-36
Biochemical Oxygen Demand	<2 J	1.2	<2.0	<2.0	<2	1.1	1.3	<2 J	1.1
Chemical Oxygen Demand	<10	<10	<20	<20	<10	13	11	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.8	1.6	1.6	<1.0	3.8	3.9	3.9	1.2	1.1

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-36 (continued)	GM-37A				GM-37B	
Top of Screen Depth (ft bls)	95	144	144	144	144	328	328
Sample Date	05/04/04	11/18/98	05/11/99	09/25/03	05/17/04	10/13/98	05/14/99
Sample I.D.	GWGM-36 (5/4/04)	GWGM-37A	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B	GWGM-37B
Biochemical Oxygen Demand	<2.0	300	875	64	500	3,000 J	3,390
Chemical Oxygen Demand	12 J	1,300	1,400	590	920	6,400	4,500
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1.0	590	710	170	280	2,100	2,100

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)		GM-38A			GM-38B		GM-38C
Top of Screen Depth (ft bls)	328	328	95	95	95	160	160	200
Sample Date	09/25/03	05/27/04	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98
Sample I.D.	GM-37B	GWGM-37B (5/27/04)	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C
Biochemical Oxygen Demand	880	1,200	<2 J	<2 J	1.1	2.2 J	1.8	<2 J
Chemical Oxygen Demand	2,600	340	<10	<10	75	<10	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1,100	930	<1	<1	<1	2.5	3	1.7

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C (continued)		GM-39			GM-40A		
Top of Screen Depth (ft bls)	200	200	85	85	85	75	75	75
Sample Date	10/20/98	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04
Sample I.D.	GWGM-97	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)
Biochemical Oxygen Demand	<2 J	1.3	5.9 J	4.9	4.4	<2	<1.0	<2.0
Chemical Oxygen Demand	<10	<10	<10	<10	<10	<10	<10	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2	2.5	1.4	1.5	1.5	<1	<1	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B			GM-41		GM-42		GM-49
Top of Screen Depth (ft bls)	120	120	120	40	40	72	72	83.5
Sample Date	10/26/98	04/27/99	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99
Sample I.D.	GWGM-40B	GWGM-40B	GWGM-40B (5/19/04)	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49
Biochemical Oxygen Demand	53 J	>250	2,700	9.5 J	3.1	3.4 J	1.3	7.5
Chemical Oxygen Demand	5,300	5,300	4,100	<10	<10	11	21	13
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	2,300	2,000	1,300	3.4	2.8	6.1	5.9	4.7

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-50		GM-51		GM-52	GM-53A	GM-53B		GM-54
Top of Screen Depth (ft bls)	80.5	80.5	67	67	75	79	195	195	80
Sample Date	10/14/98	04/17/99	10/20/98	04/18/99	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98
Sample I.D.	GWGM-50	GWGM-50	GWGM-51	GWGM-51	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54
Biochemical Oxygen Demand	16 J	8.1	<2	4.7	13	2.1	31 J	30	<2 J
Chemical Oxygen Demand	<10	<10	<10	<10	<10	10	200	170	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1	1.3	<1	<1	1	1.7	78	<1	<1

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-54 (continued)	GM-55			GM-56		GM-57	GM-58
Top of Screen Depth (ft bls)	80	75	75	75	32	32	76	75
Sample Date	05/01/99	10/24/98	05/01/99	05/01/99	10/21/98	04/20/99	04/20/99	04/26/99
Sample I.D.	GWGM-54	GWGM-55	GWGM-55	GWGM-85	GWGM-56	GWGM-56	GWGM-57	GWGM-58
Biochemical Oxygen Demand	<1.0	11 J	15	12	<2	<1.0	5.5	5.9
Chemical Oxygen Demand	<10	<10	<10	<10	<10	<10	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1	1.6	1.4	1.3	1.5	1.1	<1	<1

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-59			GM-60	GM-61		GM-62A
Top of Screen Depth (ft bls)	114	114	114	102	138	138	90
Sample Date	11/17/98	04/28/99	05/01/04	05/12/99	05/03/99	05/01/04	08/23/99
Sample I.D.	GWGM-59	GWGM-59	GWGM-59 (5/1/04)	GWGM-60	GWGM-61	GWGM-61 (5/1/04)	GWGM-62A
Biochemical Oxygen Demand	<2	<1.0	NA	5.1	2.9	NA	<2.0
Chemical Oxygen Demand	<10	<10	NA	<10	<10	NA	93
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.8	1.8	0.68 B	2.1	2.8	<1.0	37

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62A (continued)	GM-62B			GM-62C	
Top of Screen Depth (ft bls)	90	195	195	195	315	315
Sample Date	05/11/04	08/24/99	08/24/99	05/19/04	08/24/99	05/18/04
Sample I.D.	GWGM-62A (5/11/04)	GWGM-62B	GWGM-82	GWGM-62B (5/19/04)	GWGM-62C	GWGM-62C (5/18/04)
Biochemical Oxygen Demand	<2.0	2,300	2,700	720	1,000	140
Chemical Oxygen Demand	82	4,100	3,700	1,600	1,900	480
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA
Total Organic Carbon	25	1,700	1,700	490	820	150

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A				GM-63B			GM-64A
Top of Screen Depth (ft bls)	45	45	45	45	105	105	105	33
Sample Date	08/29/00	09/19/00	09/15/03	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00
Sample I.D.	GWGM-63A	GWGM-63A	GM-63A	GWGM-63A (5/5/04)	GWGM-63B	GM-63B	GWGM-63B (4/27/04)	GWGM-64A
Biochemical Oxygen Demand	7.9	20	3.8	20	<2.0	<2.0	<2.0	<2.0
Chemical Oxygen Demand	240	240	180	260	<20	<20	12 J	110
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	70	77	51	76	<1.0	<1.0	<1.0	29

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)			GM-64B			GM-66A	
Top of Screen Depth (ft bls)	33	33	33	117	117	117	27	27
Sample Date	10/03/00	09/08/03	05/04/04	07/24/00	09/08/03	05/11/04	07/18/00	09/16/03
Sample I.D.	GWGM-64A	GM-64A	GWGM-64A (5/4/04)	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A
Biochemical Oxygen Demand	<2.0	<2.0	2.7	37	9.1	8.4	<2.0	<2.0
Chemical Oxygen Demand	72	69	120	200 J	220	220	<20 J	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	22	18	32	63	67	63	<1.0	2

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A (continued)		GM-66B			
Top of Screen Depth (ft bls)	27	27	125	125	125	125
Sample Date	04/27/04	07/27/05	07/19/00	08/03/00	09/11/03	05/10/04
Sample I.D.	GWGM-66A (4/27/04)	GWGM66A (072705)	GWGM-66B	GMGW-66B	GM-66B	GWGM-66B (5/10/04)
Biochemical Oxygen Demand	<2.0	<2.0	18	11	9.4	6.5
Chemical Oxygen Demand	12 J	11 J	200 J	210	90	180
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA
Total Organic Carbon	<1.0	0.72 J	67	64	54	50

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)		GM-67		GM-68		GM-70
Top of Screen Depth (ft bls)	125	125	122	122	140	140	42
Sample Date	07/27/05	12/08/06	08/07/00	05/01/04	08/31/00	09/26/00	08/17/00
Sample I.D.	GWGM66B (072705)	GWGM-66B (12/8/06)	GWGM-67	GWGM-67 (5/1/04)	GWGM-68	GWGM-68	GWGM-70
Biochemical Oxygen Demand	3.3	7.8	<3.0	NA	<2.0	<2.0	<2.0 J
Chemical Oxygen Demand	170	52	24	NA	<20	<20	380
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	48	21	5.5	3.9	<1.0	<1.0	120

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-71	GM-72				GM-72A	
Top of Screen Depth (ft bls)	39	43	43	43	43	46	46
Sample Date	08/21/00	08/22/00	09/24/03	01/05/04	04/16/04	07/25/05	12/12/06
Sample I.D.	GWGM-71	GWGM-72	GM-72	GWGM-72	GM-72	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)
Biochemical Oxygen Demand	<2.0	65	64	38	48	150	40 H
Chemical Oxygen Demand	29	950	1,000	1,100	950	1,400	NA
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	8.9	270	280	290	270	350	280

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-73	GM-74	GM-75	GM-77			GM-78
Top of Screen Depth (ft bls)	42	34	24	105	105	105	20
Sample Date	09/06/00	09/07/00	09/08/00	09/22/03	05/11/04	07/28/05	09/18/03
Sample I.D.	GWGM-73	GWGM-74	GWGM-75	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)	GM-78 (9/18/03)
Biochemical Oxygen Demand	<2.0	<2.0	<2.0	6.5	6.3	5.6	<2.0
Chemical Oxygen Demand	27	<20	210 J	200	140	180	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	5	<1.0	2.9	59	40	2.8	5.5

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78 (continued)				GM-79
Top of Screen Depth (ft bls)	20	20	20	20	25
Sample Date	04/29/04	07/29/05	07/29/05	12/08/06	09/18/03
Sample I.D.	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)
Biochemical Oxygen Demand	<2.0	<2.0	<2.0	2.3	<2.0
Chemical Oxygen Demand	26	37	35	0	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	5.1	9.2	9	4.3	8

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-79 (continued)			GM-82A	
Top of Screen Depth (ft bls)	25	25	25	95	114
Sample Date	04/26/04	07/29/05	12/04/06	06/02/04	06/05/04
Sample I.D.	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)
Biochemical Oxygen Demand	<2.0	<2.0	<2.0	<2.0	5
Chemical Oxygen Demand	28	32	24	<20	140
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	8.8	9.3	1.7	<1.0	38

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-84			GM-87A	
Top of Screen Depth (ft bls)	77	77	77	32	32
Sample Date	08/19/04	08/01/05	12/12/06	12/05/06	12/05/06
Sample I.D.	GWGM-84 (8/19/04)	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)	GWGM-87A (12/5/06)	GWGM-999(12/5/06)
Biochemical Oxygen Demand	<2.0	<2.0	<2.0	<2.0	<2.0
Chemical Oxygen Demand	15 J	<20	0	20	NA
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	0.62 B	<1.0	<1.0	7.8	7.9

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-87B	GM-118D		GMSB-111	GMSB-112	
Top of Screen Depth (ft bls)	117	54	54	--	--	--
Sample Date	12/05/06	10/21/98	04/29/99	08/19/03	09/03/03	09/03/03
Sample I.D.	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D	GBGWGMSB-111/26	GBGWGMSB-112/134	GBGWGMSB-112/192
Biochemical Oxygen Demand	4.2	<2	1.1	<2.0	33	<2.0
Chemical Oxygen Demand	3	<10	<10	<20	990	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA
Total Organic Carbon	1.9	1.2	<1	1.2	300	3.5

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-113			GMSB-116	
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/05/03	09/05/03	09/04/03	08/12/03	08/12/03
Sample I.D.	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27	GBGWGMSB-116/122	GBGWGMSB-116/122-RE
Biochemical Oxygen Demand	20	<2.0	<2.0	29 *F26	8.2
Chemical Oxygen Demand	600	62	<20	230	NA
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	170	20	2.7	71	NA

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-116 (continued)		GMSB-117		GMSB-118
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/11/03	08/11/03	08/14/03	08/15/03	08/16/03
Sample I.D.	GBGWGMSB-116/32	GBGWGMSB-116/32-RE	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25
Biochemical Oxygen Demand	<2.0	<2.0	7.3	8.9	19
Chemical Oxygen Demand	<20	NA	210	400	290
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	<1.0	NA	65	130	88

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-119		GMSB-122	GMSB-123	MPMW-4
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/18/03	08/17/03	09/08/03	09/09/03	02/26/02
Sample I.D.	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150	GWMPMW-4 (2/26/02)
Biochemical Oxygen Demand	<2.0	<2.0	11	27	<2.0
Chemical Oxygen Demand	53	<20	1400	460	<20
Dissolved Organic Carbon	NA	NA	NA	NA	NA
Total Organic Carbon	13	1.3	440	300	<1.0

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-1B	MW-2B	MW-5		MW-8			
Top of Screen Depth (ft bls)	86	102	83	83	133	133	133	133
Sample Date	06/27/97	06/28/97	10/22/98	04/30/99	06/29/97	06/29/97	10/24/98	05/03/99
Sample I.D.	GWMW-1B	GWMW-2B	GWMW-5	GWMW-5	GWGM-99	GWMW-8	GWMW-8	GWMW-8
Biochemical Oxygen Demand	NA	NA	<2 J	<1.0	NA	NA	44 J	23
Chemical Oxygen Demand	27	55	<10	<10	340	300	240	180
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	7	11 J	1.6	1.4	92 J	95 J	87	92

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-8 (continued)	MW-9A	MW-10	UG-2			UG-4		
Top of Screen Depth (ft bls)	133	57	95	48	48	48	103	103	103
Sample Date	05/12/04	07/02/97	06/30/97	07/01/97	10/27/98	05/03/99	10/13/97	10/13/97	10/23/98
Sample I.D.	GWMW-8 (5/12/04)	GWMW-9A	GWMW-10	GWUG-2	GWUG-2	GWUG-2	GM-79	UG-4	GWUG-4
Biochemical Oxygen Demand	28	NA	NA	NA	<2 J	2.6	NA	NA	<2 J
Chemical Oxygen Demand	200	78	40	17	<10	<10	43	<10	<10
Dissolved Organic Carbon	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon	59	130	2	1	1	1.2	<1	1	2.2

Results reported in milligrams per liter (mg/L).

< Less than detection limit.

-- Not applicable.

> A result is greater than the reported numerical value.

*F26 Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.

*F70 Received and analyzed outside hold time criteria per client request.

B Constituent was also detected in laboratory blank.

BOD Biological oxygen demand.

COD Chemical oxygen demand.

DOC Dissolved organic carbon.

ft bls Feet below land surface.

J Estimated results.

M Matrix interference reported by laboratory.

NA Not analyzed.

TOC Total organic carbon.

Table 4-5. Summary of TOC/BOD/COD/DOC Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4 (continued)	UG-6
Top of Screen Depth (ft bls)	103	236
Sample Date	05/02/99	10/21/97
Sample I.D.	GWUG-4	UG-6
Biochemical Oxygen Demand	1.3	NA
Chemical Oxygen Demand	<10	23
Dissolved Organic Carbon	NA	NA
Total Organic Carbon	2.3	<1

Results reported in milligrams per liter (mg/L).

<	Less than detection limit.
--	Not applicable.
>	A result is greater than the reported numerical value.
*F26	Sample BOD results increase with increasing dilutions, indicating sample toxicity. Although results are reported from the greatest sample dilution which met method criteria for oxygen depletion, the BOD concentration may be biased.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
BOD	Biological oxygen demand.
COD	Chemical oxygen demand.
DOC	Dissolved organic carbon.
ft bls	Feet below land surface.
J	Estimated results.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
TOC	Total organic carbon.

Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
BR-2	GWBR-2	06/29/97	75	0.023
BR-3	GWBR-3	06/28/97	122	***2.9***
BR-5A	GWBR-5A	07/01/97	88	***0.82***
BR-5B	GWBR-5B	07/01/97	188	***15.8***
BR-5B	GWGM-98	07/01/97	188	***17.1***
BR-6	GWBR-6	06/29/97	149	0.013
CW-1	CW-1	10/14/97	130	***19.13***
CW-1	GWCW-1	10/22/98	130	***17.2***
CW-1	GWCW-1	04/29/99	130	***14.6***
GM-1	GWGM-1	06/24/97	220	***98.4***
GM-1	GM-1	10/09/97	220	***91.7***
GM-1	GWGM-1	10/07/98	220	***73.8***
GM-1	GWGM-1	04/16/99	220	***165***
GM-1	GWGM-1 (4/28/04)	04/28/04	220	***28.3***
GM-2A	GWGM-2A	07/02/97	40	***11.7***
GM-2A	GM-2A	10/12/97	40	***19.2***
GM-2B	GWGM-2B	06/26/97	271	***70.7***
GM-2B	GM-2B	10/21/97	271	***460***
GM-2B	GWGM-2B	11/22/98	271	***218***
GM-2B	GWGM-2B	04/16/99	271	***165***
GM-2B	GWGM-2B(5/25/04)	05/25/04	271	***77.5***
GM-2C	GWGM-2C	11/06/98	64	***5.6***
GM-2C	GWGM-2C	04/14/99	64	***5.18***
GM-2C	GWGM-2C (5/4/04)	05/04/04	64	***0.57***
GM-3A	GM-3A	10/10/97	74	0.006
GM-3A	GWGM-3A	10/09/98	74	0.14
GM-3A	GWGM-3A	04/13/99	74	0.0014
GM-3A	GWGM-3A (5/11/04)	05/11/04	74	***0.53***
GM-3B	GWGM-3B	06/26/97	170	***127***
GM-3B	GM-3B	10/14/97	170	***84.31***
GM-3B	GWGM-3B	10/08/98	170	***61.7***
GM-3B	GWGM-3B	04/17/99	170	***95.6***
GM-3B	GWGM-88	04/17/99	170	***102***
GM-3B	GWGM-3B (5/11/04)	05/11/04	170	***28.4***
GM-4	GWGM-4	06/26/97	76	0.02
GM-4	GM-4	10/14/97	76	0.0043
GM-4	GWGM-4	10/20/98	76	0.02
GM-4	GWGM-4	04/21/99	76	0.057
GM-4	GWGM-4 (5/22/04)	05/22/04	76	0.065
GM-5	GWGM-5	07/02/97	250	***74.4***
GM-5	GM-5	10/15/97	250	***36.4***
GM-5	GWGM-5	04/18/99	250	***92.2***
GM-6	GWGM-6	06/28/97	165	***62.5***
GM-6	GM-6	10/22/97	165	***64.8***
GM-6	GWGM-6	10/10/98	165	***57.1***
GM-6	GWGM-6	04/19/99	165	***25.2***
GM-6	GWGM-6	07/19/00	165	***59.3***
GM-7	GWGM-7	06/29/97	145	***16.3***

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-7	GM-7	10/11/97	145	***31.7***
GM-7	GWGM-7	10/23/98	145	***25.3***
GM-7	GWGM-7	05/01/99	145	***31.6***
GM-7	GM-7	09/23/03	145	***16.6***
GM-7	GWGM-7 (5/3/04)	05/03/04	145	***20.1***
GM-8	GWGM-8	06/30/97	79	0.02
GM-8	GM-8	10/12/97	79	<0.0011
GM-8	GWGM-8	10/09/98	79	0.02
GM-8	GWGM-8	04/13/99	79	<0.0009
GM-8	GM-8	10/21/99	79	0.051
GM-9	GM-9	10/13/97	164	0.17
GM-9	GWGM-9	10/11/98	164	0.24
GM-9	GWGM-9	04/18/99	164	0.32
GM-9	GM-9	09/10/03	164	0.037
GM-9	GWGM-9 (5/3/04)	05/03/04	164	0.48
GM-9	GWGM-9 (072805)	07/28/05	164	0.37
GM-10	GM-10	10/14/97	170	0.028
GM-10	GWGM-10	11/06/98	170	0.024
GM-10	GWGM-10	04/27/99	170	***1.06***
GM-11	GM-11	10/15/97	174.7	0.12
GM-12	GM-12	10/22/97	290	0.47
GM-12	GWGM-12	10/10/98	290	0.22
GM-12	GWGM-12	04/19/99	290	0.27
GM-13	GM-13	10/22/97	325	***24.8***
GM-13	GWGM-13	04/20/99	325	***38.8***
GM-13	GWGM-13 (5/18/04)	05/18/04	325	***16***
GM-14	GM-14	10/21/97	135	***7.33***
GM-14	GWGM-14	10/23/98	135	***8.96***
GM-14	GWGM-14	10/28/98	135	***7.29***
GM-14	GWGM-14	05/02/99	135	***8.46***
GM-15	GM-15	10/20/97	165	***2.06***
GM-15	GWGM-15	10/11/98	165	***2.14***
GM-15	GWGM-15	04/20/99	165	***2.8***
GM-15	GWGM-15 (5/10/04)	05/10/04	165	***2.96***
GM-15	GWGM-996 (5/10/04)	05/10/04	165	***2.57***
GM-16	GM-16	10/22/97	108	0.0055
GM-16	GM-78	10/22/97	108	0.012
GM-16	GWGM-16	10/09/98	108	<0.0009
GM-16	GWGM-16	04/14/99	108	0.0065
GM-16	GM-16	09/23/03	108	0.09
GM-16	GWGM-16 (4/27/04)	04/27/04	108	<0.01
GM-17	GM-17	10/28/97	224.3	***12.4***
GM-17	GWGM-17	10/12/98	224.3	***11.9***
GM-17	GWGM-17	04/26/99	224.3	***5.88***
GM-17	GWGM-17 (5/16/04)	05/16/04	224.3	***1.23***
GM-18	GM-18	12/04/97	50	<0.0009
GM-18	GWGM-18	11/07/98	50	<0.001
GM-19	GM19	12/04/97	46	<0.0009

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-21	GM-21	12/03/97	5	0.019
GM-21	GM-95	12/03/97	5	0.019
GM-21	GWGM-21	10/13/98	5	0.03
GM-22	GM-22	12/05/97	6	0.022
GM-22	GWGM-22	10/10/98	6	0.03
GM-22	GWGM-22	04/13/99	6	0.16
GM-23	GM-23	12/03/97	3.5	0.123
GM-23	GWGM-23	10/10/98	3.5	0.01
GM-23	GWGM-23 (5/12/04)	05/12/04	3.5	<0.007
GM-23	GWGM-995 (5/12/04)	05/12/04	3.5	<0.005
GM-24A	GWGM-24A	11/09/98	71	***32.7***
GM-24A	GWGM-24A	05/04/99	71	***34.7***
GM-24B	GWGM-24B	11/17/98	104	***9.44***
GM-24B	GWGM-94	11/17/98	104	***9.85***
GM-24B	GWGM-24B	05/05/99	104	***5.01***
GM-24B	GWGM-24B (5/4/04)	05/04/04	104	***8.55***
GM-24C	GWGM-24C	11/20/98	193	0.02
GM-24C	GWGM-93	11/20/98	193	0.04
GM-24C	GWGM-24C	05/13/99	193	0.18
GM-24C	GM-24C	09/24/03	193	0.19
GM-24C	GWGM-24C (4/29/04)	04/29/04	193	0.35
GM-25A	GWGM-25A	10/06/98	19	***38.9***
GM-25A	GWGM-25A	04/16/99	19	***28.4***
GM-25A	GM-25A	09/09/03	19	***40.2***
GM-25A	GWGM-25A (5/12/04)	05/12/04	19	***38.2***
GM-25B	GWGM-25B	10/06/98	98	***107***
GM-25B	GWGM-25B	04/27/99	98	***112.3***
GM-25B	GM-25B	10/20/99	98	***108.7***
GM-25B	GM-25B	09/09/03	98	***23.9***
GM-25B	GWGM-25B (5/18/04)	05/18/04	98	***137***
GM-25C	GWGM-25C	11/09/98	206	***9.05***
GM-25C	GWGM-95	11/09/98	206	***11.6***
GM-25C	GWGM-25C	04/20/99	206	***26.5***
GM-25C	GWGM-25C	08/02/00	206	***30.3***
GM-25C	GM-25C	09/15/03	206	***8.47***
GM-25C	GWGM-25C (5/4/04)	05/04/04	206	***35.3***
GM-25C	GWGM-25C (08/01/05)	08/01/05	206	***32.7***
GM-26A	GWGM-26A	10/07/98	30	***59***
GM-26A	GWGM-26A	04/14/99	30	***53.5***
GM-26A	GWGM-26A (5/13/04)	05/13/04	30	***37.3***
GM-26B	GWGM-26B	10/07/98	101	0.32
GM-26B	GWGM-26B	04/15/99	101	0.072
GM-26B	GWGM-26B	07/18/00	101	***6.34***
GM-26B	GM-26B	09/09/03	101	***13.1***
Gm-26B	GWGM-26B (4/27/04)	04/27/04	101	***16.4***
GM-26B	GWGM-26B (072805)	07/28/05	101	***12***
GM-26C	GWGM-26C	10/25/98	160	***128***
GM-26C	GWGM-26C	04/17/99	160	***134***

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-26C	GM-26C	09/16/03	160	***63.5***
GM-26C	GWGM-26C (5/18/04)	05/18/04	160	***199***
GM-26C	GWGM-994 (5/18/04)	05/18/04	160	***347***
GM-27A	GWGM-27A	10/08/98	30	***48.2***
GM-27A	GWGM-27A	04/15/99	30	***27.4***
GM-27A	GM-27A	09/10/03	30	***40.4***
GM-27A	GWGM-27A (5/13/04)	05/13/04	30	***25.4***
GM-27B	GWGM-27B	10/26/98	145	0.05
GM-27B	GWGM-27B	04/14/99	145	0.18
GM-27B	GWGM-27B	07/18/00	145	0.049
GM-27B	GM-27B	09/10/03	145	0.011
GM-27B	GWGM-27B (4/30/04)	04/30/04	145	0.01
GM-27B	GWGM-998 (4/30/04)	04/30/04	145	0.01
GM-27B	GWGM-27B (08/05/05)	08/05/05	145	0.01
GM-27B	GWGM27B (12/7/06)	12/7/2006	145	0.005
GM-27C	GWGM-27C	11/09/98	210	0.08
GM-27C	GWGM-27C	04/26/99	210	***13.5***
GM-27C	GWGM-86	04/26/99	210	0.067
GM-27C	GMGW-27C	08/07/00	210	***1.1***
GM-27C	GM-27C	09/11/03	210	0.088
GM-27C	GWGM-27C (4/30/04)	04/30/04	210	0.12
GM-27C	GWGM-27C (08/05/05)	08/05/05	210	0.09
GM-28A	GWGM-28A	10/28/98	40	***37.6***
GM-28A	GWGM-28A	04/19/99	40	***30.3***
GM-28A	GWGM-28A	07/19/00	40	***23.6***
GM-28A	GWGM-28A (4/28/04)	04/28/04	40	***33.5***
GM-28A	GWGM28A (072605)	07/26/05	40	***30.7***
GM-28A	GWGM-999 (7/26/05)	07/26/05	40	***31.6***
GM-28A	GWGM-28A(12/5/06)	12/5/2006	40	***20.8***
GM-28B	GWGM-96	10/24/98	124.5	0.3
GM-28B	GWGM-28B	11/08/98	124.5	0.1
GM-28B	GWGM-96	11/08/98	124.5	0.005
GM-28B	GWGM-28B	04/19/99	124.5	0.41
GM-28B	GWGM-87	04/19/99	124.5	0.064
GM-28B	GWGM-28B (4/28/04)	04/28/04	124.5	0.01
GM-28B	GWGM-999 (4/28/04)	04/28/04	124.5	0.01
GM-28B	GWGM28B (072605)	07/26/05	124.5	0.01
GM-28B	GWGM-28B(12/5/06)	12/5/2006	124.5	0.063
GM-29	GWGM-29	10/09/98	55	***29.2***
GM-29	GWGM-99	10/09/98	55	***28.5***
GM-29	GWGM-29	04/16/99	55	***22.4***
GM-29	GM-29	09/10/03	55	***8.75***
GM-29	GWGM-29 (5/3/04)	05/03/04	55	***6.27***
GM-29	GWGM-29 (07/28/05)	07/28/05	55	***6.12***
GM-29	GWGM-29 (12/8/06)	12/8/2006	55	***7.7***
GM-30	GWGM-30	10/27/98	75	***27.4***
GM-30	GWGM-30	05/12/99	75	***8.46***
GM-30	GWGM-83	05/12/99	75	***8.45***

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-31	GWGM-31	10/24/98	105	***6.98***
GM-31	GWGM-31	05/03/99	105	***5.03***
GM-32	GWGM-32	10/25/98	135	***11***
GM-32	GWGM-32	04/27/99	135	***33.2***
GM-32	GM-32	09/25/03	135	***14.4***
GM-32	GWGM-32(5/26/04)	05/26/04	135	***8.24***
GM-34A	GWGM-34A	10/08/98	30	0.11
GM-34A	GWGM-34A	04/17/99	30	0.22
GM-34A	GWGM-34A (4/29/04)	04/29/04	30	<0.01
GM-34B	GWGM-34B	10/12/98	85	0.11
GM-34B	GWGM-34B	04/14/99	85	0.014
GM-34B	GM-34B	09/24/03	85	0.004
GM-34B	GWGM-34B (4/28/04)	04/28/04	85	0.05
GM-35	GWGM-35	11/04/98	40	***0.57***
GM-35	GWGM-35	05/04/99	40	***4.21***
GM-36	GWGM-36	11/03/98	95	0.02
GM-36	GWGM-36	05/05/99	95	0.026
GM-36	GWGM-36 (5/4/04)	05/04/04	95	0.02
GM-37A	GWGM-37A	11/18/98	144	***66.1***
GM-37A	GM-37A	09/25/03	144	***28.5***
GM-37A	GWGM-37A (5/17/04)	05/17/04	144	***31.7***
GM-37B	GWGM-37B	05/14/99	328	***121***
GM-37B	GM-37B	09/25/03	328	***161***
GM-37B	GWGM-37B (5/27/04)	05/27/04	328	***20.8***
GM-38A	GWGM-38A	10/13/98	95	0.04
GM-38A	GWGM-98	10/13/98	95	0.01
GM-38A	GWGM-38A	04/15/99	95	0.0083
GM-38B	GWGM-38B	10/14/98	160	***0.88***
GM-38B	GWGM-38B	04/29/99	160	***0.91***
GM-38C	GWGM-38C	10/20/98	200	0.37
GM-38C	GWGM-97	10/20/98	200	0.36
GM-38C	GWGM-38C	04/30/99	200	***0.64***
GM-39	GWGM-39	10/12/98	85	***9.12***
GM-39	GWGM-39	04/15/99	85	***5.88***
GM-39	GWGM-89	04/15/99	85	***5.7***
GM-40A	GWGM-40A	10/26/98	75	***1.46***
GM-40A	GWGM-40A	04/28/99	75	0.23
GM-40A	GWGM-40A (5/3/04)	05/03/04	75	0.5
GM-40B	GWGM-40B	10/26/98	120	***54***
GM-40B	GWGM-40B	04/27/99	120	***63.1***
GM-40B	GWGM-40B (5/19/04)	05/19/04	120	***23.8***
GM-41	GWGM-41	10/19/98	40	***8.32***
GM-41	GWGM-41	04/16/99	40	***3.62***
GM-42	GWGM-42	10/20/98	72	0.47
GM-42	GWGM-42	04/16/99	72	***0.82***
GM-49	GWGM-49	04/17/99	83.5	***9.2***
GM-50	GWGM-50	10/14/98	80.5	***33***
GM-50	GWGM-50	04/17/99	80.5	***30.4***

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-51	GWGM-51	10/20/98	67	***1.86***
GM-51	GWGM-51	04/18/99	67	***5.4***
GM-52	GWGM-52	04/19/99	75	***30.4***
GM-53A	GWGM-53A	04/19/99	79	***31.7***
GM-53B	GWGM-53B	11/05/98	195	***131***
GM-53B	GWGM-53B	05/01/99	195	***147***
GM-54	GWGM-54	10/24/98	80	0.08
GM-54	GWGM-54	05/01/99	80	0.091
GM-55	GWGM-55	10/24/98	75	***19.1***
GM-55	GWGM-55	05/01/99	75	***22.8***
GM-55	GWGM-85	05/01/99	75	***24.6***
GM-56	GWGM-56	10/21/98	32	0.03
GM-56	GWGM-56	04/20/99	32	0.3
GM-57	GWGM-57	04/20/99	76	***14.3***
GM-58	GWGM-58	04/26/99	75	***7.69***
GM-58	GWGM-58 (5/22/04)	05/22/04	75	0.056
GM-59	GWGM-59	11/17/98	114	0.16
GM-59	GWGM-59	04/28/99	114	0.17
GM-59	GWGM-59 (5/15/04)	05/15/04	114	0.49
GM-59	GWGM-997 (5/22/04)	05/22/04	114	0.062
GM-59	GWGM-59 (7/29/05)	07/29/05	114	0.09
GM-61	GWGM-61	05/03/99	138	***5.71***
GM-61	GWGM-61 (5/16/04)	05/16/04	138	***1.11***
GM-61	GWGM-61 (7/30/05)	07/30/05	138	***0.76***
GM-62A	GWGM-62A	08/23/99	90	***8.47***
GM-62A	GWGM-62A (5/11/04)	05/11/04	90	***12.8***
GM-62A	GWGM-62A MS	08/23/99	90	***7.87***
GM-62A	GWGM-62A MSD	08/23/99	90	***7.99***
GM-62B	GWGM-62B	08/24/99	195	***66.2***
GM-62B	GWGM-82	08/24/99	195	***134***
GM-62B	GWGM-62B (5/19/04)	05/19/04	195	***64.1***
GM-62C	GWGM-62C	08/24/99	315	***298***
GM-62C	GWGM-62C (5/18/04)	05/18/04	315	***52.6***
GM-63A	GWGM-63A	10/18/00	45	***52.5***
GM-63A	GM-63A	09/15/03	45	***36.8***
GM-63A	GWGM-63A (5/5/04)	05/05/04	45	***48.3***
GM-63B	GWGM-63B	02/07/01	105	0.023
GM-63B	GM-63B	09/11/03	105	0.023
GM-63B	GWGM-63B (4/27/04)	04/27/04	105	0.03
GM-64A	GWGM-64A	08/30/00	33	***35.6***
GM-64A	GWGM-64A	10/19/00	33	***44.1***
GM-64A	GM-64A	09/08/03	33	***37.4***
GM-64A	GWGM-64A (5/4/04)	05/04/04	33	***36.9***
GM-64B	GM-64B	09/08/03	117	***32.9***
GM-64B	GWGM-64B (5/11/04)	05/11/04	117	***91.8***
GM-66A	GWGM-66A	07/18/00	27	***26.9***
GM-66A	GM-66A	09/16/03	27	***38.7***
GM-66A	GWGM-66A (4/27/04)	04/27/04	27	***37.9***
GM-66A	GWGM66A (072705)	07/27/05	27	***30.8***

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GM-66B	GWGM-66B	07/19/00	125	***82.6***
GM-66B	GMGW-66B	08/03/00	125	***93.2***
GM-66B	GM-66B	09/11/03	125	***73.2***
GM-66B	GWGM-66B (5/10/04)	05/10/04	125	***83.3***
GM-66B	GWGM66B (072705)	07/27/05	125	***71.1***
GM-66B	GWGM-66B (12/8/06)	12/8/2006	125	***22.7***
GM-67	GWGM-67	08/07/00	122	***12.9***
GM-67	GWGM-67 (5/17/04)	05/17/04	122	***23.1***
GM-68	GWGM-68	10/17/00	140	0.02
GM-68	GWGM-68 (5/24/04)	05/24/04	140	0.077
GM-68	GWGM-68 (7/31/05)	07/31/05	140	0.02
GM-70	GWGM-70	08/17/00	42	***16.3***
GM-71	GWGM-71	08/21/00	39	***2.63***
GM-72	GWGM-72	08/22/00	43	***13.6***
GM-72	GM-72	09/24/03	43	***11.8***
GM-72	GWGM-72	01/05/04	43	***12.7***
GM-72	GM-72	04/16/04	43	***10.4***
GM-72A	GWGM-72A (07/25/05)	07/25/05	46	***19.9***
GM-72A	GWGM-72A (12/12/06)	12/12/2006	46	***14.9***
GM-73	GWGM-73	09/06/00	42	<0.0011
GM-74	GWGM-74	09/07/00	34	<0.001
GM-75	GMGW-75	09/08/00	24	0.024
GM-77	GM-77	09/22/03	105	***34.3***
GM-77	GWGM-77 (5/11/04)	05/11/04	105	***84.6***
GM-77	GWGM-77 (072805)	07/28/05	105	***60.4***
GM-78	GM-78 (9/18/03)	09/18/03	20	***31.9***
GM-78	GWGM-78 (4/29/04)	04/29/04	20	***37.1***
GM-78	GWGM-78 (7/29/05)	07/29/05	20	***28.5***
GM-78	GWGM-998 (7/29/05)	07/29/05	20	***34.7***
GM-78	GWGM-78 (12/8/06)	12/8/2006	20	***12.2***
GM-79	GM-79 (9/18/03)	09/18/03	25	***1.76***
GM-79	GWGM-79 (4/26/04)	04/26/04	25	***28.7***
GM-79	GWGM-79 (7/29/05)	07/29/05	25	***29.3***
GM-79	GWGM-79(12/4/06)	12/4/2006	25	***30.9***
GM-80	GWGM-80 (5/3/04)	05/03/04	113	***0.73***
GM-82A	GBGWGM-82/95 (6/3/04)	06/02/04	95	***32***
GM-82A	GBGWGM-82/114 (6/5/04)	06/05/04	114	***26.2***
GM-84	GWGM-84 (8/26/04)	08/26/04	77	0.0048
GM-84	GWGM-84 (08/01/05)	08/01/05	77	0.02
GM-84	GWGM-84 (12/12/06)	12/12/2006	77	0.01
GM-85	GWGM-85 (9/1/04)	09/01/04	75	0.01
GM-85	GWGM-85 (7/31/05)	07/31/05	75	0.01
GM-87A	GWGM-87A (12/5/06)	12/5/2006	32	***31.4***
GM-87A	GWGM-999(12/5/06)	12/5/2006	32	***33***
GM-87B	GWGM-87B(12/5/06)	12/5/2006	117	0.22
GM-118D	GWGM-118D	10/21/98	54	0.006
GM-118D	GWGM-118D	04/29/99	54	0.0087
GMSB-111	GBGWGMSB-111/26	08/19/03	--	***1.34***
GMSB-112	GBGWGMSB-112/192	09/03/03	--	0.373

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Table 4-6. Summary of Dissolved-Phase Methane Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Sample I.D.	Sample Date	Top of Screen Depth (ft bls)	Dissolved-Phase Methane
GMSB-113	GBGWGMSB-113/155	09/05/03	--	***150***
GMSB-113	GBGWGMSB-113/199	09/05/03	--	***7.01***
GMSB-113	GBGWGMSB-113/27	09/04/03	--	***8.17***
GMSB-117	GBGWGMSB-117/154	08/15/03	--	***36.7***
GMSB-118	GBGWGMSB-118/25	08/16/03	--	***32.9***
GMSB-119	GBGWGMSB-119/125	08/18/03	--	***12.4***
GMSB-119	GBGWGMSB-119/45	08/17/03	--	***5.34***
GMSB-122	GBGWGMSB-122/145	09/08/03	--	***78.2***
GMSB-123	GBGWGMSB-123/150	09/09/03	--	***95.9***
Grailer	GBGW-53C	05/12/99	--	0.0087
Grailer	GBGW-53 C (8/07/03)	08/07/03	--	<0.001
Hambel	GBGW-101 C (8/06/03)	08/06/03	--	0.002
Krans	GBGW-101 F (8/06/03)	08/06/03	--	<0.001
Michaud	GBGW-101 G (8/06/03)	08/06/03	--	<0.0009
Schnieder	GBGW-113	05/03/99	--	0.022
Schnieder	GBGW-113 (8/07/03)	08/07/03	--	<0.0009
MPMW-4	GWMPMW-4 (2/26/02)	02/26/02	--	ND
MW-1B	GWMW-1B	06/27/97	86	***18.2***
MW-2B	GWMW-2B	06/28/97	102	***34.8***
MW-5	GWMW-5	10/22/98	83	0.02
MW-5	GWMW-5	04/18/99	83	0.11
MW-8	GWGM-99	06/29/97	133	***83***
MW-8	GWMW-8	06/29/97	133	***86***
MW-8	GWMW-8	10/24/98	133	***57.3***
MW-8	GWMW-8	05/03/99	133	***68.7***
MW-8	GWMW-8 (5/12/04)	05/12/04	133	***21.1***
MW-9B	GWMW-9B (7/2/97)	07/02/97	107	0.014
MW-10	GWMW-10	06/30/97	95	0.011
UG-1	GWUG-1 (5/21/04)	05/21/04	81	0.36
UG-1	GWGM-997 (7/31/05)	07/31/05	81	0.002
UG-1	GWUG-1 (7/31/05)	07/31/05	81	0.003
UG-2	GWUG-2	07/01/97	48	0.02
UG-2	GWUG-2	10/27/98	48	0.22
UG-2	GWUG-2	05/03/99	48	0.1
UG-3	GWUG-3 (5/10/04)	05/10/04	44	0.06
UG-3	GWUG-3 (8/2/05)	08/02/05	44	0.004
UG-4	GM-79	10/13/97	103	0.013
UG-4	UG-4	10/13/97	103	0.13
UG-4	GWUG-4	10/23/98	103	0.22
UG-4	GWUG-4	05/02/99	103	0.22
UG-5	GWUG-5 (5/22/04)	05/22/04	139	0.077
UG-5	GWUG-5 (8/3/05)	08/03/05	139	0.06
UG-6	UG-6	10/21/97	236	0.15

Results are reported in milligrams per liter (mg/L).

<	Less than detection limit.
2.9	Indicates a value above the Groundwater Flammability and Explosivity Screening Level of 0.520 mg/L (Operational Memorandum 1, Attachment 1, January 23, 2006).
--	Not applicable.
ft bls	Feet below land surface.

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A			BR-6	CW-1			GM-1		
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130	220	220	220
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99	06/24/97	10/09/97	10/07/98
Sample ID	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1	GWGM-1	GM-1	GWGM-1
Aluminum	NA	NA	NA	NA	NA	NA	NA	<200	<200	150	NA	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	148	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	<50	<50	<5	NA	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	NA
Arsenic	NA	NA	NA	NA	NA	NA	NA	16	16	7.2	NA	13
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.3	NA	NA
Barium	NA	NA	NA	NA	NA	NA	NA	**500**	**530**	325	NA	**480**
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	360	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5	NA	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	NA
Cadmium	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	NA	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	NA	NA
Calcium	774,000	51,200 J	270,000	154,000	162,000	59,800	76,200	75,000	77,000	105,000	117,000	120,000
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	81,600	NA	NA	126,000	123,000	NA
Chromium	NA	NA	NA	NA	NA	NA	NA	<50	<50	<50	NA	<50
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA	<50	<50	<50	NA	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	<25	<25	<25	NA	***29***
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<25	NA	NA
Iron	617,000	151 J	13,200	5,070	5,270	<100	5,500	4,500	4,400	5,460	9,030	14,000
Iron-Dissolved	<100	111 J	11,400	2,180	2,110	<100	3,870	NA	NA	5,110	9,660	NA
Lead	NA	NA	NA	NA	NA	NA	NA	<3	<3	<3	NA	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3	NA	NA
Magnesium	513,000	28,800 J	107,000	61,700	62,200	30,100	45,100	47,000	48,000	69,300	88,900	100,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	48,700	NA	NA	78,800	92,800	NA
Manganese	***14,000***	150 J	1,440	691	713	<15	994	1,000	1,000	1,220	1,220	850
Manganese-Dissolved	153	634 J	1,390	638	690	<15	1,050	NA	NA	1,430	1,230	NA
Mercury	NA	NA	NA	NA	NA	NA	NA	<0.2	<0.2	<0.2	NA	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.2	NA	NA
Molybdenum	NA	NA	NA	NA	NA	NA	NA	<100	<100	NA	NA	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A			BR-6	CW-1			GM-1		
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130	220	220	220
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99	06/24/97	10/09/97	10/07/98
Sample ID	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1	GWGM-1	GM-1	GWGM-1
Nickel	NA	NA	NA	NA	NA	NA	NA	<50	<50	<50	NA	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	NA	NA
Potassium	62,600	<5,000 J	5,350	6,960	6,800	<5,000	<5,000	2,800	3,000	<5,000	<5,000	4,900
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	<5,000	NA	NA	<5,000	<5,000	NA
Selenium	NA	NA	NA	NA	NA	NA	NA	<5	<5	<5	NA	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	NA
Silver	NA	NA	NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	NA	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	NA	NA
Sodium	20,300	24,200 J	6,880	16,600	16,000	<5,000	5,960	6,700	7,000	22,700	12,200	11,000
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	6,590	NA	NA	23,200	11,000	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	<2	<2	<2	NA	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2	NA	NA
Titanium	NA	NA	NA	NA	NA	NA	NA	<50	<50	NA	NA	<50
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	<20	<20	<20	NA	<20
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	30	<20	<51.4	NA	50
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	<45.1	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1 (continued)		GM-2A		GM-2B					
Top of Screen Depth (ft bls)	220	220	40	40	271	271	271	271	271	271
Sample Date	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97	12/11/97	11/22/98	04/16/99	05/25/04
Sample ID	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B	GM-2B	GWGM-2B	GWGM-2B	GWGM-2B(5/25/04)
Aluminum	<200	99 B	NA	NA	20,900 J	NA	NA	<200	<200	2,600
Aluminum-Dissolved	NA	<200	NA	NA	<100 J	NA	NA	NA	NA	14 B
Antimony	<50	<50	NA	NA	<5 J	NA	NA	<50	<50	<50
Antimony-Dissolved	NA	<50	NA	NA	<5 J	NA	NA	NA	NA	<50
Arsenic	13 J	19 B	NA	NA	11.9 J	NA	NA	8.7	<5	15 B
Arsenic-Dissolved	NA	17 B	NA	NA	<5 J	NA	NA	NA	NA	14 B
Barium	**490**	**560**	NA	NA	**562 J**	NA	NA	**630**	**430**	**590**
Barium-Dissolved	NA	**540**	NA	NA	**446 J**	NA	NA	NA	NA	**570**
Beryllium	<5	<1.0	NA	NA	<5 J	NA	NA	<5	<5	<1.0
Beryllium-Dissolved	NA	<1.0	NA	NA	<5 J	NA	NA	NA	NA	<1.0
Cadmium	<0.5	<0.50	NA	NA	<0.5 J	NA	NA	<0.5	<0.5	<0.50
Cadmium-Dissolved	NA	<0.50	NA	NA	<0.5 J	NA	NA	NA	NA	<0.50
Calcium	120,000	100,000	84,600	86,900	274,000 J	238,000	297,000	250,000 J	170,000	170,000
Calcium-Dissolved	NA	100,000	NA	87,000	194,000 J	228,000	192,000	NA	NA	170,000
Chromium	<50	1.5 B	NA	NA	***967 J***	NA	NA	<50	<50	***220***
Chromium-Dissolved	NA	0.66 B	NA	NA	<50 J	NA	NA	NA	NA	3.7 B
Cobalt	<50	2.7 B	NA	NA	<50 J	NA	NA	<50	<50	6.5 B
Cobalt-Dissolved	NA	2.9 B	NA	NA	<50 J	NA	NA	NA	NA	4.4 B
Copper	<25	4.5 B	NA	NA	***84.5 J***	NA	NA	<25	<25	**21 B**
Copper-Dissolved	NA	<25	NA	NA	<25 J	NA	NA	NA	NA	<25
Iron	16,000	18,000	494	1,340	33,600 J	38,900	82,900	21,000	14,000	20,000
Iron-Dissolved	NA	18,000	270	1,330	6,430 J	12,200	11,800	NA	NA	16,000
Lead	<3	<3.0	NA	NA	7.6 J	NA	NA	<3	<3	<3.0
Lead-Dissolved	NA	<3.0	NA	NA	<3 J	NA	NA	NA	NA	<3.0
Magnesium	100,000	100,000	32,600	32,600	175,000 J	187,000	209,000	230,000 J	160,000	180,000
Magnesium-Dissolved	NA	100,000	NA	32,600	158,000 J	183,000	161,000	NA	NA	180,000
Manganese	720	200	584	497	**4,040 J**	**2,290**	**2,860**	790 J	750	260
Manganese-Dissolved	NA	200	618	498	**3,050 J**	**2,050**	1,210	NA	NA	180
Mercury	<0.2	<0.20	NA	NA	<0.2 J	NA	NA	<0.2	<0.2	<0.20
Mercury-Dissolved	NA	<0.20	NA	NA	<0.2 J	NA	NA	NA	NA	<0.20
Molybdenum	<100	2.7 B	NA	NA	NA	NA	NA	<100	<100	13
Molybdenum-Dissolved	NA	2.7 B	NA	NA	NA	NA	NA	NA	NA	6.7 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1 (continued)		GM-2A		GM-2B					
Top of Screen Depth (ft bls)	220	220	40	40	271	271	271	271	271	271
Sample Date	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97	12/11/97	11/22/98	04/16/99	05/25/04
Sample ID	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B	GM-2B	GWGM-2B	GWGM-2B	GWGM-2B(5/25/04)
Nickel	<50	4.7 B	NA	NA	**514 J**	NA	NA	<50	<50	**120**
Nickel-Dissolved	NA	3.9 B	NA	NA	<50 J	NA	NA	NA	NA	9.9 B
Potassium	5,200	16,000	<5,000	<5,000	10,300 J	10,800	15,700	7,300 J	6,300	8,000
Potassium-Dissolved	NA	14,000	NA	<5,000	6,040 J	6,410	6,400	NA	NA	7,300
Selenium	<5	<5.0	NA	NA	<5 J	NA	NA	<5	<5	3.7 B
Selenium-Dissolved	NA	<5.0	NA	NA	<5 J	NA	NA	NA	NA	3.9 B
Silver	<0.5	<0.20	NA	NA	<0.5 J	NA	NA	<0.5	<0.5	<0.20
Silver-Dissolved	NA	<0.20	NA	NA	<0.5 J	NA	NA	NA	NA	<0.20
Sodium	11,000	15,000	26,400	22,600	53,400 J	53,100	54,400	64,000 J	48,000	NA
Sodium-Dissolved	NA	14,000	NA	22,400	52,800 J	53,300	49,600	NA	NA	NA
Thallium	<2	<2.0	NA	NA	<2 J	NA	NA	<2	<2	<2.0
Thallium-Dissolved	NA	<2.0	NA	NA	<2 J	NA	NA	NA	NA	<2.0
Titanium	<50	4.9 B	NA	NA	NA	NA	NA	<50	<50	150
Titanium-Dissolved	NA	1.9 B	NA	NA	NA	NA	NA	NA	NA	52
Vanadium	<20	2.7 B	NA	NA	**80.6 J**	NA	NA	**40**	**44**	**49**
Vanadium-Dissolved	NA	2.6 B	NA	NA	<20 J	NA	NA	NA	NA	**36**
Zinc	<20	15 B	NA	NA	<112 MBD	NA	NA	92	39	15 B
Zinc-Dissolved	NA	3.9 B	NA	NA	<108 J	NA	NA	NA	NA	9.5 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2B (continued)	GM-2C				GM-3A		
Top of Screen Depth (ft bls)	271	64	64	64	64	74	74	74
Sample Date	05/25/04	11/06/98	04/13/99	05/04/04	05/04/04	06/25/97	10/10/97	10/09/98
Sample ID	GWGM-2B(5/25/04)-DL	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-2C (5/4/04)-DL	GWGM-3A	GM-3A	GWGM-3A
Aluminum	NA	<200	<200	840	NA	160	NA	<200
Aluminum-Dissolved	NA	NA	NA	25 B	NA	<100 J	NA	NA
Antimony	NA	<50	<50	<50	NA	<5	NA	<50
Antimony-Dissolved	NA	NA	NA	<50	NA	<5 J	NA	NA
Arsenic	NA	12	14 J	9.3 B	NA	<5	NA	<5
Arsenic-Dissolved	NA	NA	NA	8.0 B	NA	<5 J	NA	NA
Barium	NA	<200	<200	250	NA	<200	NA	<200
Barium-Dissolved	NA	NA	NA	240	NA	<200 J	NA	NA
Beryllium	NA	<5	<5	<1.0	NA	<5	NA	<5
Beryllium-Dissolved	NA	NA	NA	<1.0	NA	<5 J	NA	NA
Cadmium	NA	<0.5	<0.5	<0.50	NA	<0.5	NA	<0.5
Cadmium-Dissolved	NA	NA	NA	<0.50	NA	<0.5 J	NA	NA
Calcium	NA	53,000	55,000	75,000	NA	78,900	73,700	71,000
Calcium-Dissolved	NA	NA	NA	73,000	NA	75,000 J	67,200	NA
Chromium	NA	<50	<50	**17**	NA	<50	NA	<50
Chromium-Dissolved	NA	NA	NA	<5.0	NA	<50 J	NA	NA
Cobalt	NA	<50	<50	<10	NA	<50	NA	<50
Cobalt-Dissolved	NA	NA	NA	<10	NA	<50 J	NA	NA
Copper	NA	<25	<25	**19 B**	NA	<25	NA	<25
Copper-Dissolved	NA	NA	NA	2.9 B	NA	***27.0 J***	NA	NA
Iron	NA	2,100	2,800	7,300	NA	<100	<100	<20
Iron-Dissolved	NA	NA	NA	6,000	NA	<100 J	<100	NA
Lead	NA	<3	<3	<3.0	NA	<3	NA	<3
Lead-Dissolved	NA	NA	NA	<3.0	NA	<3 J	NA	NA
Magnesium	NA	21,000	23,000	28,000	NA	27,600	27,300	26,000
Magnesium-Dissolved	NA	NA	NA	27,000	NA	27,600 J	24,800	NA
Manganese	NA	450	590	**2,500**	NA	744	610	420
Manganese-Dissolved	NA	NA	NA	**2,400**	NA	709 J	559	NA
Mercury	NA	<0.2	<0.2	<0.20	NA	<0.2	NA	<0.2
Mercury-Dissolved	NA	NA	NA	<0.20	NA	<0.2 J	NA	NA
Molybdenum	NA	<100	<100	1.4 B	NA	NA	NA	<100
Molybdenum-Dissolved	NA	NA	NA	<10	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2B (continued)	GM-2C				GM-3A		
Top of Screen Depth (ft bls)	271	64	64	64	64	74	74	74
Sample Date	05/25/04	11/06/98	04/13/99	05/04/04	05/04/04	06/25/97	10/10/97	10/09/98
Sample ID	GWGM-2B(5/25/04)-DL	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-2C (5/4/04)-DL	GWGM-3A	GM-3A	GWGM-3A
Nickel	NA	<50	<50	9.9 B	NA	<50	NA	<50
Nickel-Dissolved	NA	NA	NA	3.6 B	NA	<50 J	NA	NA
Potassium	NA	3,200	3,400	5,700	NA	<5,000	<5,000	5,800
Potassium-Dissolved	NA	NA	NA	5,300	NA	<5,000 J	<5,000	NA
Selenium	NA	<5	<5	<5.0	NA	<5	NA	<5
Selenium-Dissolved	NA	NA	NA	<5.0	NA	<5 J	NA	NA
Silver	NA	<0.5	<0.5	<0.20	NA	<0.5	NA	<0.5
Silver-Dissolved	NA	NA	NA	<0.20	NA	<0.5 J	NA	NA
Sodium	50,000	34,000	27,000	NA	120,000	11,300	10,600	13,000
Sodium-Dissolved	50,000	NA	NA	NA	120,000	11,100 J	9,680	NA
Thallium	NA	<2	<2	<2.0	NA	<2	NA	<2
Thallium-Dissolved	NA	NA	NA	<2.0	NA	<2 J	NA	NA
Titanium	NA	<50	<50	41 B	NA	NA	NA	<50
Titanium-Dissolved	NA	NA	NA	<50	NA	NA	NA	NA
Vanadium	NA	<20	<20	2.0 B	NA	<20	NA	<20
Vanadium-Dissolved	NA	NA	NA	<20	NA	<20 J	NA	NA
Zinc	NA	<20	<20	6.8 B	NA	<91.5	NA	28
Zinc-Dissolved	NA	NA	NA	2.9 B	NA	<73.3 J	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3A (continued)		GM-3B						
Top of Screen Depth (ft bls)	74	74	170	170	170	170	170	170	170
Sample Date	04/13/99	05/05/04	06/26/97	10/14/97	10/08/98	04/17/99	04/17/99	05/11/04	05/11/04
Sample ID	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GM-3B	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)	GWGM-3B (5/11/04)-DL
Aluminum	<200	41 B	244 J	NA	<200	<200	<200	17 B	NA
Aluminum-Dissolved	NA	25 B	176 J	NA	NA	NA	NA	<200	NA
Antimony	<50	<50	<5 J	NA	<50	<50	<50	<50	NA
Antimony-Dissolved	NA	<50	<5 J	NA	NA	NA	NA	<50	NA
Arsenic	<5 J	<20	<5 J	NA	<5	11	95	9.4 B	NA
Arsenic-Dissolved	NA	<20	<5 J	NA	NA	NA	NA	7.4 B	NA
Barium	<200	57 B	311 J	NA	390	380	380	**550**	NA
Barium-Dissolved	NA	56 B	288 J	NA	NA	NA	NA	**410**	NA
Beryllium	<5	<1.0	<5 J	NA	<5	<5	<5	<1.0	NA
Beryllium-Dissolved	NA	<1.0	<5 J	NA	NA	NA	NA	<1.0	NA
Cadmium	<0.5	<0.50	<0.5 J	NA	<0.5	<0.5	<0.5	<0.50 *F5	NA
Cadmium-Dissolved	NA	<0.50	<0.5 J	NA	NA	NA	NA	<0.50 *F5	NA
Calcium	66,000	78,000	131,000 J	169,000	170,000	140,000	140,000	150,000	NA
Calcium-Dissolved	NA	77,000	142,000 J	164,000	NA	NA	NA	130,000	NA
Chromium	<50	2.1 B	<50 J	NA	<50	<50	<50	1.4 B	NA
Chromium-Dissolved	NA	1.4 B	<50 J	NA	NA	NA	NA	<5.0	NA
Cobalt	<50	<10	<50 J	NA	<50	<50	<50	2.0 B	NA
Cobalt-Dissolved	NA	<10	<50 J	NA	NA	NA	NA	1.2 B	NA
Copper	<25	***37***	<25 J	NA	***43***	<25	<25	4.1 B	NA
Copper-Dissolved	NA	***31***	<25 J	NA	NA	NA	NA	6.0 B	NA
Iron	<20	50 B	4,790 J	9,590	15,000	15,000	15,000	21,000	NA
Iron-Dissolved	NA	15 B	3,450 J	8,650	NA	NA	NA	13,000	NA
Lead	<3	<3.0	<3 J	NA	<3	<3	<3	<3.0	NA
Lead-Dissolved	NA	1.4 B	<3 J	NA	NA	NA	NA	<3.0	NA
Magnesium	25,000	28,000	73,900 J	112,000	110,000	110,000	110,000	130,000	NA
Magnesium-Dissolved	NA	27,000	78,000 J	109,000	NA	NA	NA	110,000	NA
Manganese	400	230	1,140 J	1,540	1,200	570	580	230	NA
Manganese-Dissolved	NA	200	1,220 J	1,500	NA	NA	NA	170	NA
Mercury	<0.2	<0.20	<0.2 J	NA	<0.2	<0.2	<0.2	<0.20	NA
Mercury-Dissolved	NA	<0.20	<0.2 J	NA	NA	NA	NA	<0.20	NA
Molybdenum	<100	<10	NA	NA	<100	<100	<100	1.6 B	NA
Molybdenum-Dissolved	NA	<10	NA	NA	NA	NA	NA	8.0 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3A (continued)		GM-3B						
Top of Screen Depth (ft bls)	74	74	170	170	170	170	170	170	170
Sample Date	04/13/99	05/05/04	06/26/97	10/14/97	10/08/98	04/17/99	04/17/99	05/11/04	05/11/04
Sample ID	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GM-3B	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)	GWGM-3B (5/11/04)-DL
Nickel	<50	<25	<50 J	NA	<50	<50	<50	3.1 B	NA
Nickel-Dissolved	NA	<25	<50 J	NA	NA	NA	NA	2.9 B	NA
Potassium	2,200	2,600	<5,000 J	<5,000	5,400	11,000	11,000	NA	14,000
Potassium-Dissolved	NA	2,600	<5,000 J	<5,000	NA	NA	NA	NA	25,000
Selenium	<5	<5.0	<5 J	NA	<5	<5	<5	<5.0	NA
Selenium-Dissolved	NA	<5.0	<5 J	NA	NA	NA	NA	<5.0	NA
Silver	<0.5	<0.20	<0.5 J	NA	<0.5	<0.5	<0.5	<0.20	NA
Silver-Dissolved	NA	<0.20	<0.5 J	NA	NA	NA	NA	<0.20	NA
Sodium	12,000	24,000	19,000 J	13,500	16,000	17,000	17,000	16,000	NA
Sodium-Dissolved	NA	24,000	19,900 J	11,500	NA	NA	NA	22,000	NA
Thallium	<2	<2.0	<2 J	NA	<2	<2	<2	0.60 B*F5	NA
Thallium-Dissolved	NA	<2.0	<2 J	NA	NA	NA	NA	<2.0 *F5	NA
Titanium	<50	2.1 B	NA	NA	<50	<50	<50	1.7 B	NA
Titanium-Dissolved	NA	<50	NA	NA	NA	NA	NA	0.88 B	NA
Vanadium	<20	0.67 B	<20 J	NA	<20	<20	<20	6.9 B	NA
Vanadium-Dissolved	NA	0.42 B	<20 J	NA	NA	NA	NA	5.9 B	NA
Zinc	<20	5.4 B	<63.6 J	NA	27	<20	<20	8.6 B	NA
Zinc-Dissolved	NA	5.1 B	<33.2 J	NA	NA	NA	NA	7.3 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-4				GM-5						GM-6	
Top of Screen Depth (ft bls)	76	76	76	76	250	250	250	250	250	250	165	165
Sample Date	06/26/97	10/14/97	10/20/98	04/21/99	07/02/97	10/15/97	04/18/99	11/30/99	08/15/00	09/20/00	06/28/97	10/22/97
Sample ID	GWGM-4	GM-4	GWGM-4	GWGM-4	GWGM-5	GM-5	GWGM-5	GM-5	GWGM-5	GWGM-5	GWGM-6	GM-6
Aluminum	NA	NA	<200	<200	466 J	NA	<200	NA	NA	NA	NA	373
Aluminum-Dissolved	NA	NA	NA	NA	<100 J	NA	NA	25 B	NA	NA	NA	<100
Antimony	NA	NA	<50	<50	<5 J	NA	<50	NA	NA	NA	NA	<5
Antimony-Dissolved	NA	NA	NA	NA	<5	NA	NA	<50	NA	NA	NA	<5
Arsenic	NA	NA	<5	31	86.5 J	NA	7.6	NA	NA	NA	NA	84.3
Arsenic-Dissolved	NA	NA	NA	NA	83.0 J	NA	NA	100	NA	NA	NA	85.5
Barium	NA	NA	<200	<200	288 J	NA	270	NA	NA	NA	NA	<200
Barium-Dissolved	NA	NA	NA	NA	272 J	NA	NA	290	NA	NA	NA	<200
Beryllium	NA	NA	<5	<5	<5 J	NA	<5	NA	NA	NA	NA	<5
Beryllium-Dissolved	NA	NA	NA	NA	<5 J	NA	NA	<1.0	NA	NA	NA	<5
Cadmium	NA	NA	<0.5	<0.5	<0.5 J	NA	<0.5	NA	NA	NA	NA	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	<0.5 J	NA	NA	<0.50 W	NA	NA	NA	<0.5
Calcium	45,500	46,300	51,000	42,000	130,000 J	117,000	110,000	NA	120,000	NA	124,000 J	111,000
Calcium-Dissolved	NA	49,500	NA	NA	122,000 J	109,000	NA	110,000	NA	120,000	NA	117,000
Chromium	NA	NA	<50	<50	<50 J	NA	<50	NA	NA	NA	NA	<50
Chromium-Dissolved	NA	NA	NA	NA	<50 J	NA	NA	0.65 B	NA	NA	NA	<50
Cobalt	NA	NA	<50	<50	<50 J	NA	<50	NA	NA	NA	NA	<50
Cobalt-Dissolved	NA	NA	NA	NA	<50 J	NA	NA	3.3 B	NA	NA	NA	<50
Copper	NA	NA	<25	<25	***26.9 J***	NA	<25	NA	NA	NA	NA	<25
Copper-Dissolved	NA	NA	NA	NA	<25 J	NA	NA	<25	NA	NA	NA	<25
Iron	191	392	<20	<20	10,500 J	10,600	11,000	NA	11,000	NA	12,700 J	10,500
Iron-Dissolved	<100	<100	NA	NA	9,570 J	9,260	NA	11,000	NA	12,000	12,400 J	10,400
Lead	NA	NA	<3	<3	<3 J	NA	<3	NA	NA	NA	NA	<3
Lead-Dissolved	NA	NA	NA	NA	<3 J	NA	NA	<3.0	NA	NA	NA	<3
Magnesium	21500	24,500	29,000	23,000	152,000 J	165,000	170,000	NA	190,000	NA	119,000 J	104,000
Magnesium-Dissolved	NA	26,400	NA	NA	147,000 J	152,000	NA	170,000	NA	200,000	NA	111,000
Manganese	50.5	16.5	<5	<5	181 J	237	120	99	NA	NA	998 J	742
Manganese-Dissolved	48.6	<15	NA	NA	149 J	224	NA	NA	NA	NA	811 J	817
Mercury	NA	NA	<0.2	<0.2	<0.2 J	NA	<0.2	NA	NA	NA	NA	<0.2
Mercury-Dissolved	NA	NA	NA	NA	<0.2 J	NA	NA	<0.20	NA	NA	NA	<0.2
Molybdenum	NA	NA	<100	<100	NA	NA	<100	NA	NA	NA	NA	NA
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	2.7 B	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-4				GM-5						GM-6	
Top of Screen Depth (ft bls)	76	76	76	76	250	250	250	250	250	250	165	165
Sample Date	06/26/97	10/14/97	10/20/98	04/21/99	07/02/97	10/15/97	04/18/99	11/30/99	08/15/00	09/20/00	06/28/97	10/22/97
Sample ID	GWGM-4	GM-4	GWGM-4	GWGM-4	GWGM-5	GM-5	GWGM-5	GM-5	GWGM-5	GWGM-5	GWGM-6	GM-6
Nickel	NA	NA	<50	<50	<50 J	NA	<50	NA	NA	NA	NA	<50
Nickel-Dissolved	NA	NA	NA	NA	<50 J	NA	NA	3.4 B	NA	NA	NA	<50
Potassium	7,350	<5,000	2,600	2,100	12,600 J	9,180	5,500	NA	7,000	NA	<5,000 J	<5,000
Potassium-Dissolved	NA	<5,000	NA	NA	11,500 J	8,650	NA	6,200	NA	6,100	NA	<5,000
Selenium	NA	NA	<5	<5	<5 J	NA	<5	NA	NA	NA	NA	<5
Selenium-Dissolved	NA	NA	NA	NA	<5 J	NA	NA	<5.0	NA	NA	NA	<5
Silver	NA	NA	**0.64**	<0.5	<0.5 J	NA	<0.5	NA	NA	NA	NA	<0.5
Silver-Dissolved	NA	NA	NA	NA	<0.5 J	NA	NA	<0.20	NA	NA	NA	<0.5
Sodium	7,930	<5,000	2,900	3,000	32,400 J	32,500	33,000	NA	35,000 J	NA	15,300 J	13,700
Sodium-Dissolved	NA	<5,000	NA	NA	30,900 J	32,200	NA	34,000	NA	36,000	NA	12,900
Thallium	NA	NA	<2	<2	<2 J	NA	<2	NA	NA	NA	NA	<2
Thallium-Dissolved	NA	NA	NA	NA	<2 J	NA	NA	<2.0 W	NA	NA	NA	<2
Titanium	NA	NA	<50	<50	NA	NA	<50	NA	NA	NA	NA	NA
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	0.82 B	NA	NA	NA	NA
Vanadium	NA	NA	<20	<20	<20 J	NA	<20	NA	NA	NA	NA	<20
Vanadium-Dissolved	NA	NA	NA	NA	<20 J	NA	NA	4.1 B	NA	NA	NA	<20
Zinc	NA	NA	<20	<20	36.9 MBD J	NA	<20	NA	NA	NA	NA	21.5
Zinc-Dissolved	NA	NA	NA	NA	59.8 MBD J	NA	NA	1.5 B	NA	NA	NA	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-6 (continued)					GM-7					
Top of Screen Depth (ft bls)	165	165	165	165	165	145	145	145	145	145	145
Sample Date	10/10/98	04/19/99	02/29/00	07/19/00	09/25/00	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04
Sample ID	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)
Aluminum	<200	<200	NA	NA	NA	NA	NA	<200	<200	760	8.6 B
Aluminum-Dissolved	NA	NA	NA	<31	NA	NA	NA	NA	NA	<200	<200
Antimony	<50	<50	NA	NA	NA	NA	NA	<50	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	<50	NA	NA	NA	NA	NA	<50	<50
Arsenic	86	90	NA	NA	NA	NA	NA	5.4	11	<20	6.4 B
Arsenic-Dissolved	NA	NA	NA	64	NA	NA	NA	NA	NA	<20	6.9 B
Barium	<200	<200	NA	NA	NA	NA	NA	<200	<200	150	70 B
Barium-Dissolved	NA	NA	NA	120	NA	NA	NA	NA	NA	<100	68 B
Beryllium	<5	<5	NA	NA	NA	NA	NA	<5	<5	<1.0	<1.0
Beryllium-Dissolved	NA	NA	NA	<1.0	NA	NA	NA	NA	NA	<1.0	<1.0
Cadmium	<0.5	<0.5	NA	NA	NA	NA	NA	<0.5	<0.5	<0.50	<0.50
Cadmium-Dissolved	NA	NA	NA	<0.50	NA	NA	NA	NA	NA	<0.50	<0.50
Calcium	110,000	110,000	NA	NA	NA	63,600	64,300	53,000	46,000 J	56,000	51,000
Calcium-Dissolved	NA	NA	100,000	100,000	100,000	NA	68,700	NA	NA	49,000	50,000
Chromium	<50	<50	NA	NA	NA	NA	NA	<50	<50	<5.0	0.85 B
Chromium-Dissolved	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	<5.0	<5.0
Cobalt	<50	<50	NA	NA	NA	NA	NA	<50	<50	<10	<10
Cobalt-Dissolved	NA	NA	NA	0.70 B	NA	NA	NA	NA	NA	<10	<10
Copper	<25	<25	NA	NA	NA	NA	NA	R	<25	***43***	3.3 B
Copper-Dissolved	NA	NA	NA	<25	NA	NA	NA	NA	NA	<25	1.4 B
Iron	12,000	12,000	NA	NA	NA	4,480	2,740	820	400	2,000	1,000
Iron-Dissolved	NA	NA	12,000 J	8,200	12,000	550	2,880	NA	NA	540	930
Lead	<3	<3	NA	NA	NA	NA	NA	<3	<3	<3.0	<3.0
Lead-Dissolved	NA	NA	NA	<3.0	NA	NA	NA	NA	NA	<3.0	<3.0
Magnesium	110,000	110,000	NA	NA	NA	30,500	30,800	34,000	32,000	29,000	28,000
Magnesium-Dissolved	NA	NA	100,000	110,000	100,000	NA	33,200	NA	NA	30,000	28,000
Manganese	700	500	NA	NA	NA	854	917	1,000 J	850 J	800	740
Manganese-Dissolved	NA	NA	NA	270	NA	768	988	NA	NA	760	730
Mercury	<0.2	<0.2	NA	NA	NA	NA	NA	<0.2	<0.2	<0.20	<0.20
Mercury-Dissolved	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	<0.20
Molybdenum	<100	<100	NA	NA	NA	NA	NA	<100 J	<100	<10	2.8 B
Molybdenum-Dissolved	NA	NA	NA	<10	NA	NA	NA	NA	NA	<10	3.5 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-6 (continued)					GM-7					
Top of Screen Depth (ft bls)	165	165	165	165	165	145	145	145	145	145	145
Sample Date	10/10/98	04/19/99	02/29/00	07/19/00	09/25/00	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04
Sample ID	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)
Nickel	<50	<50	NA	NA	NA	NA	NA	<50	<50	<25	1.4 B
Nickel-Dissolved	NA	NA	NA	<25	NA	NA	NA	NA	NA	<25	1.2 B
Potassium	3,400	3,700	NA	NA	NA	<5,000	<5,000	19,000	19,000	9,000	4,700
Potassium-Dissolved	NA	NA	3,800	3,700	3,800	NA	<5,000	NA	NA	8,200	4,500
Selenium	<5	<5 J	NA	NA	NA	NA	NA	<5	<5	<5.0	<5.0
Selenium-Dissolved	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	<5.0	<5.0
Silver	<0.5	<0.5	NA	NA	NA	NA	NA	<0.5	<0.5	<0.20	<0.20
Silver-Dissolved	NA	NA	NA	<0.20	NA	NA	NA	NA	NA	<0.20	<0.20
Sodium	14,000	14,000	NA	NA	NA	27,100	11,100	14,000	14,000	10,000	8,200
Sodium-Dissolved	NA	NA	13,000	13,000	13,000	NA	10,600	NA	NA	11,000	8,200
Thallium	<2	<2	NA	NA	NA	NA	NA	<2	<2	<2.0	<2.0
Thallium-Dissolved	NA	NA	NA	<2.0	NA	NA	NA	NA	NA	<2.0	<2.0
Titanium	<50	<50	NA	NA	NA	NA	NA	<50	<50	50	1.5 B
Titanium-Dissolved	NA	NA	NA	0.41 B	NA	NA	NA	NA	NA	<50	<50
Vanadium	<20	<20	NA	NA	NA	NA	NA	<20	<20	<20	0.36 B
Vanadium-Dissolved	NA	NA	NA	<0.88	NA	NA	NA	NA	NA	<20	<20
Zinc	<20	<20	NA	NA	NA	NA	NA	<20 J	<20	32	4.5 B
Zinc-Dissolved	NA	NA	NA	<2.7	NA	NA	NA	NA	NA	<20	3.4 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8					GM-9					
Top of Screen Depth (ft bls)	79	79	79	79	79	164	164	164	164	164	164
Sample Date	06/30/97	10/12/97	10/09/98	04/13/99	10/21/99	10/13/97	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05
Sample ID	GWGM-8	GM-8	GWGM-8	GWGM-8	GM-8	GM-9	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)
Aluminum	<200	NA	<200	<200	62 B	NA	<200	<200	<200	140 B	41 J
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<200	<200	<200
Antimony	NA	NA	<50	<50	<50	NA	<50	<50	<50	<50	<50
Antimony-Dissolved	<10	NA	NA	NA	NA	NA	NA	NA	<50	<50	<50
Arsenic	NA	NA	<5	<5 J	<20	NA	8	7.5	<20	9.0 B	13 J
Arsenic-Dissolved	<10	NA	NA	NA	NA	NA	NA	NA	<20	11 B	9.3 J
Barium	<200	NA	<200	<200	20 B	NA	<200	<200	<100	89 B	76 J
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<100	88 B	67 J
Beryllium	<5	NA	<5	<5	<1.0	NA	<5	<5	<1.0	<1.0	<1.0
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<1.0	<1.0	<1.0
Cadmium	<1	NA	<0.5	<0.5	<0.50	NA	<0.5	<0.5	<0.50	<0.50	<0.50
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.50	<0.50	<0.50
Calcium	61,700	61,600	64,000	58,000	64,000	37,700	42,000	43,000	39,000	47,000	46,000
Calcium-Dissolved	NA	62,600	NA	NA	NA	34,800	NA	NA	43,000	47,000	39,000
Chromium	<10	NA	<50	<50	1.1 B	NA	<50	<50	<5.0	<5.0	<5.0
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0
Cobalt	<50	NA	<50	<50	<10	NA	<50	<50	<10	<10	0.22 J
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<10	<10	0.12 J
Copper	<25	NA	<25	<25	1.6 B	NA	<25	<25	<25	<25	<25
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<25	<25	<25
Iron	<100	178	<20	<20	<100	1,090	24	34	160	260	93 J
Iron-Dissolved	<100	<100	NA	NA	NA	121	NA	NA	<100	42 B	<100
Lead	NA	NA	<3	<3	<3.0	NA	<3	<3	<3.0	<3.0	<3.0
Lead-Dissolved	<3	NA	NA	NA	NA	NA	NA	NA	<3.0	<3.0	0.53 J
Magnesium	32,300	30,700	33,000	30,000	34,000	20,200	25,000	25,000	20,000	28,000	27,000
Magnesium-Dissolved	NA	30,900	NA	NA	NA	18,600	NA	NA	24,000	28,000	24,000
Manganese	205	<15	<5	<5	0.46 B	138	82	79	120	85	65
Manganese-Dissolved	218	<15	NA	NA	NA	112	NA	NA	100	82	65
Mercury	<0.2	NA	<0.2	<0.2	<0.20	NA	<0.2	<0.2	<0.20	<0.20	<0.20
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.20	<0.20	<0.20
Molybdenum	NA	NA	<100	<100	<10	NA	<100	<100	13	1.7 B	1.5 J
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<10	2.8 B	1.6 J

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8					GM-9					
Top of Screen Depth (ft bls)	79	79	79	79	79	164	164	164	164	164	164
Sample Date	06/30/97	10/12/97	10/09/98	04/13/99	10/21/99	10/13/97	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05
Sample ID	GWGM-8	GM-8	GWGM-8	GWGM-8	GM-8	GM-9	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)
Nickel	<40	NA	<50	<50	<25	NA	<50	<50	<25	<25	1.0 J
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<25	<25	<25
Potassium	<5,000	<5,000	1,600	1,500	1,800	<5,000	1,900	2,200	3,100	2,400	1,900
Potassium-Dissolved	NA	<5,000	NA	NA	NA	<5,000	NA	NA	2,500	2,400	1,800
Selenium	NA	NA	<5	<5	<5.0	NA	<5	<5	<5.0	<5.0	<5.0
Selenium-Dissolved	<5	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0
Silver	NA	NA	<0.5	<0.5	<0.20	NA	<0.5	<0.5	<0.20 W	<0.20	<0.20
Silver-Dissolved	<1	NA	NA	NA	NA	NA	NA	NA	<0.20 W	<0.20	<0.20
Sodium	21,700	20,700	25,000	22,000	26,000	6,070	4,000	3,900	15,000	4,300	5,400
Sodium-Dissolved	NA	20,300	NA	NA	NA	5,990	NA	NA	8,700	4,400	4,800
Thallium	<10	NA	<2	<2	<2.0	NA	<2	<2	<2.0	<2.0	<2.0
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<2.0	<2.0	<2.0
Titanium	NA	NA	<50	<50	<50	NA	<50	<50	<50	6.0 B	3.2 J
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<50	<50	1.4 J
Vanadium	NA	NA	<20	<20	1.2 B	NA	<20	<20	<20	<20	2.5 J
Vanadium-Dissolved	<50	NA	NA	NA	NA	NA	NA	NA	<20	<20	<20
Zinc	NA	NA	22	<20	3.1 B	NA	<20	<20	<20	10 B	<20
Zinc-Dissolved	<50	NA	NA	NA	NA	NA	NA	NA	<20	5.1 B	5.1 J

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-10			GM-11	GM-12			GM-13		
Top of Screen Depth (ft bls)	170	170	170	174.7	290	290	290	325	325	325
Sample Date	10/14/97	11/06/98	04/27/99	10/15/97	10/22/97	10/10/98	04/19/99	10/22/97	04/20/99	05/18/04
Sample ID	GM-10	GWGM-10	GWGM-10	GM-11	GM-12	GWGM-12	GWGM-12	GM-13	GWGM-13	GWGM-13 (5/18/04)
Aluminum	NA	<200	<200	NA	104	<200	<200	NA	<200	320
Aluminum-Dissolved	NA	NA	NA	NA	<100	NA	NA	NA	NA	<200
Antimony	NA	<50	<50	NA	<5	<50	<50	NA	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	5.7	NA	NA	NA	NA	<50
Arsenic	NA	19	19	NA	6	5.3	15	NA	6.7	3.3 B
Arsenic-Dissolved	NA	NA	NA	NA	7.3	NA	NA	NA	NA	<20
Barium	NA	<200	<200	NA	<200	<200	<200	NA	<200	64 B
Barium-Dissolved	NA	NA	NA	NA	<200	NA	NA	NA	NA	89 B
Beryllium	NA	<5	<5	NA	<5	<5	<5	NA	<5	<1.0
Beryllium-Dissolved	NA	NA	NA	NA	<5	NA	NA	NA	NA	<1.0
Cadmium	NA	<0.5	<0.5	NA	<0.5	<0.5	<0.5	NA	<0.5	<0.50
Cadmium-Dissolved	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	<0.50
Calcium	36,300	35,000	33,000	33,600	83,800	65,000	60,000	68,800	77,000	40,000
Calcium-Dissolved	33,400	NA	NA	32,900	65,500	NA	NA	61,000	NA	46,000
Chromium	NA	<50	<50	NA	<50	<50	<50	NA	<50	2.4 B
Chromium-Dissolved	NA	NA	NA	NA	<50	NA	NA	NA	NA	<5.0
Cobalt	NA	<50	<50	NA	<50	<50	<50	NA	<50	<10
Cobalt-Dissolved	NA	NA	NA	NA	<50	NA	NA	NA	NA	<10
Copper	NA	<25	<25	NA	<25	<25	<25	NA	<25	**12 B**
Copper-Dissolved	NA	NA	NA	NA	<25	NA	NA	NA	NA	<25
Iron	1,130	84	78	4,360	934	1,300	1,200	562	1,000	1,100
Iron-Dissolved	<100	NA	NA	120	495	NA	NA	471	NA	180
Lead	NA	<3	<3	NA	<3	<3	<3	NA	<3	4
Lead-Dissolved	NA	NA	NA	NA	<3	NA	NA	NA	NA	<3.0
Magnesium	17,600	17,000	17,000	16,100	35,700	35,000	35,000	35,800	42,000	22,000
Magnesium-Dissolved	16,100	NA	NA	15,200	32,900	NA	NA	31,600	NA	28,000
Manganese	67.1	33	31	170	101	23	19	140	120	96
Manganese-Dissolved	46.3	NA	NA	109	78.2	NA	NA	120	NA	110
Mercury	NA	<0.2	<0.2	NA	<0.2	<0.2	<0.2	NA	<0.2	<0.20
Mercury-Dissolved	NA	NA	NA	NA	<0.2	NA	NA	NA	NA	<0.20
Molybdenum	NA	<100	<100	NA	NA	<100	<100	NA	<100	4.1 B
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-10			GM-11	GM-12			GM-13		
Top of Screen Depth (ft bls)	170	170	170	174.7	290	290	290	325	325	325
Sample Date	10/14/97	11/06/98	04/27/99	10/15/97	10/22/97	10/10/98	04/19/99	10/22/97	04/20/99	05/18/04
Sample ID	GM-10	GWGM-10	GWGM-10	GM-11	GM-12	GWGM-12	GWGM-12	GM-13	GWGM-13	GWGM-13 (5/18/04)
Nickel	NA	<50	<50	NA	<50	<50	<50	NA	<50	6.6 B
Nickel-Dissolved	NA	NA	NA	NA	<50	NA	NA	NA	NA	2.9 B
Potassium	<5,000	2,000	2,900	<5,000	<5,000	8,100	11,000	<5,000	2,400	NA
Potassium-Dissolved	<5,000	NA	NA	<5,000	<5,000	NA	NA	<5,000	NA	NA
Selenium	NA	<5	<5	NA	<5	<5	<5	NA	<5 J	<5.0
Selenium-Dissolved	NA	NA	NA	NA	<5	NA	NA	NA	NA	<5.0
Silver	NA	<0.5	<0.5	NA	<0.5	<0.5	<0.5	NA	<0.5	<0.20
Silver-Dissolved	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	<0.20
Sodium	<5,000	4,600	4,700	<5,000	6,950	8,800	10,000	<5,000	5,300	NA
Sodium-Dissolved	<5,000	NA	NA	<5,000	6,770	NA	NA	<5,000	NA	NA
Thallium	NA	<2	<2	NA	<2	<2	<2	NA	<2	<2.0
Thallium-Dissolved	NA	NA	NA	NA	<2	NA	NA	NA	NA	<2.0
Titanium	NA	<50	<50	NA	NA	<50	<50	NA	<50	15 B
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.97 B
Vanadium	NA	<20	<20	NA	<20	<20	<20	NA	<20	2.0 B
Vanadium-Dissolved	NA	NA	NA	NA	<20	NA	NA	NA	NA	0.73 B
Zinc	NA	<20	<20	NA	26.8	<20	<20	NA	<20	89
Zinc-Dissolved	NA	NA	NA	NA	<20	NA	NA	NA	NA	3.5 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-13 (continued)	GM-14			GM-15			
Top of Screen Depth (ft bls)	325	135	135	135	165	165	165	165
Sample Date	05/18/04	10/21/97	10/28/98	05/02/99	10/20/97	10/11/98	04/20/99	05/10/04
Sample ID	GWGM-13 (5/18/04)-DL	GM-14	GWGM-14	GWGM-14	GM-15	GWGM-15	GWGM-15	GWGM-15 (5/10/04)
Aluminum	NA	NA	<200	<200	NA	<200	<200	44 B
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	13 B
Antimony	NA	NA	<50	<50	NA	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	<50
Arsenic	NA	NA	<5	<5	NA	<5	23	3.1 B
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	4.1 B
Barium	NA	NA	<200	<200	NA	<200	<200	73 B
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	85 B
Beryllium	NA	NA	<5	<5	NA	<5	<5	<1.0
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<1.0
Cadmium	NA	NA	<0.5	<0.5	NA	<0.5	***15***	<0.50 *F5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<0.50 *F5
Calcium	NA	70,300	77,000	52,000 J	56,000	32,000	36,000	38,000
Calcium-Dissolved	NA	72,300	NA	NA	21,900	NA	NA	40,000
Chromium	NA	NA	<50	<50	NA	<50	<50	3.1 B
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<5.0
Cobalt	NA	NA	<50	<50	NA	<50	<50	<10
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	<10
Copper	NA	NA	<25	<25	NA	<25	<25	***44***
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	3.5 B
Iron	NA	2,670	4,800	3,800	12,900	45	79	140
Iron-Dissolved	NA	2,810	NA	NA	<100	NA	NA	31 B
Lead	NA	NA	<3	<3	NA	<3	**13**	<3.0
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	<3.0
Magnesium	NA	24,200	26,000	18,000	24,000	16,000	18,000	19,000
Magnesium-Dissolved	NA	24,900	NA	NA	12,100	NA	NA	20,000
Manganese	NA	487	550	340 J	377	75	84	75
Manganese-Dissolved	NA	502	NA	NA	21.2	NA	NA	70
Mercury	NA	NA	<0.2	<0.2	NA	<0.2	<0.2	<0.20
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	<0.20
Molybdenum	NA	NA	<100	<100	NA	<100	<100	2.0 B
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	1.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-13 (continued)	GM-14			GM-15			
Top of Screen Depth (ft bls)	325	135	135	135	165	165	165	165
Sample Date	05/18/04	10/21/97	10/28/98	05/02/99	10/20/97	10/11/98	04/20/99	05/10/04
Sample ID	GWGM-13 (5/18/04)-DL	GM-14	GWGM-14	GWGM-14	GM-15	GWGM-15	GWGM-15	GWGM-15 (5/10/04)
Nickel	NA	NA	<50	<50	NA	<50	<50	2.6 B
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	2.9 B
Potassium	33,000	<5,000	2,900	1,900	<5,000	2,100	2,200	2,500
Potassium-Dissolved	26,000	<5,000	NA	NA	<5,000	NA	NA	2,300
Selenium	NA	NA	<5	<5	NA	<5	**38**	<5.0
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<5.0
Silver	NA	NA	<0.5	<0.5	NA	<0.5	**0.55**	<0.20
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	**0.095 B**
Sodium	88,000	6,130	6,100	4,100	22,300	18,000	13,000	15,000
Sodium-Dissolved	75,000	6,090	NA	NA	23,400	NA	NA	8,800
Thallium	NA	NA	<2	<2	NA	<2	<2	<2.0 *F5
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<2.0 *F5
Titanium	NA	NA	<50	<50	NA	<50	<50	1.4 B
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	<50
Vanadium	NA	NA	<20	<20	NA	<20	<20	1.4 B
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	1.2 B
Zinc	NA	NA	20	<20	NA	<20	<20	8.6 B
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	4.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)	GM-16						GM-17		
Top of Screen Depth (ft bls)	165	108	108	108	108	108	108	224.3	224.3	224.3
Sample Date	05/10/04	10/22/97	10/22/97	10/09/98	04/14/99	09/23/03	04/27/04	10/28/97	10/12/98	04/26/99
Sample ID	GWGM-996 (5/10/04)	GM-16	GM-78	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)	GM-17	GWGM-17	GWGM-17
Aluminum	37 B	NA	NA	<200	<200	960	930	NA	<200	<200
Aluminum-Dissolved	<200	NA	NA	NA	NA	<200	<200	NA	NA	NA
Antimony	<50	NA	NA	<50	<50	<50	<50	NA	<50	<50
Antimony-Dissolved	<50	NA	NA	NA	NA	<50	<50	NA	NA	NA
Arsenic	4.4 B	NA	NA	<5	<5 J	<20	<20	NA	<5	<5
Arsenic-Dissolved	5.2 B	NA	NA	NA	NA	<20	<20	NA	NA	NA
Barium	73 B	NA	NA	<200	<200	<100	54 B	NA	<200	<200
Barium-Dissolved	80 B	NA	NA	NA	NA	<100	47 B	NA	NA	NA
Beryllium	<1.0	NA	NA	<5	<5	<1.0	<1.0	NA	<5	<5
Beryllium-Dissolved	<1.0	NA	NA	NA	NA	<1.0	<1.0	NA	NA	NA
Cadmium	<0.50 *F5	NA	NA	<0.5	<0.5	<0.50	<0.50	NA	<0.5	<0.5
Cadmium-Dissolved	<0.50 *F5	NA	NA	NA	NA	<0.50	<0.50	NA	NA	NA
Calcium	38,000	65,600	65,800	65,000	67,000	92,000	76,000	35,600	18,000	28,000
Calcium-Dissolved	38,000	65,700	60,900	NA	NA	84,000	75,000	28,300	NA	NA
Chromium	3.2 B	NA	NA	<50	<50	8.2	**14**	NA	<50	<50
Chromium-Dissolved	<5.0	NA	NA	NA	NA	<5.0	1.6 B	NA	NA	NA
Cobalt	<10	NA	NA	<50	<50	<10	0.96 B	NA	<50	<50
Cobalt-Dissolved	<10	NA	NA	NA	NA	<10	<10	NA	NA	NA
Copper	***45***	NA	NA	<25	<25	<25	6.8 B	NA	<25	<25
Copper-Dissolved	4.3 B	NA	NA	NA	NA	<25	3.4 B	NA	NA	NA
Iron	140	141	153	<20	300	1,500	1,400	193	<20	<20
Iron-Dissolved	20 B	<100	<100	NA	NA	<100	<100	<100	NA	NA
Lead	<3.0	NA	NA	<3	<3	<3.0	3.2	NA	<3	<3
Lead-Dissolved	<3.0	NA	NA	NA	NA	<3.0	1.8 B	NA	NA	NA
Magnesium	19,000	30,100	30,700	32,000	34,000	43,000	35,000	17,300	2,500	14,000
Magnesium-Dissolved	19,000	30,600	28,800	NA	NA	40,000	35,000	17,600	NA	NA
Manganese	76	167	169	<5	<5	54	41	<15	<5	13
Manganese-Dissolved	67	174	162	NA	NA	<20	0.96 B	<15	NA	NA
Mercury	<0.20	NA	NA	<0.2	<0.2	<0.20	<0.20	NA	<0.2	<0.2
Mercury-Dissolved	<0.20	NA	NA	NA	NA	<0.20	<0.20	NA	NA	NA
Molybdenum	2.1 B	NA	NA	<100	<100	<10	1.3 B	NA	<100	<100
Molybdenum-Dissolved	5.4 B	NA	NA	NA	NA	<10	0.99 B	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)	GM-16						GM-17		
Top of Screen Depth (ft bls)	165	108	108	108	108	108	108	224.3	224.3	224.3
Sample Date	05/10/04	10/22/97	10/22/97	10/09/98	04/14/99	09/23/03	04/27/04	10/28/97	10/12/98	04/26/99
Sample ID	GWGM-996 (5/10/04)	GM-16	GM-78	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)	GM-17	GWGM-17	GWGM-17
Nickel	2.5 B	NA	NA	<50	<50	<25	7.6 B	NA	<50	<50
Nickel-Dissolved	2.5 B	NA	NA	NA	NA	<25	3.4 B	NA	NA	NA
Potassium	2,500	<5,000	<5,000	2,500	2,700	2,600	3,400	24,300	57,000	34,000
Potassium-Dissolved	2,200	<5,000	<5,000	NA	NA	2,400	3,100	23,100	NA	NA
Selenium	<5.0	NA	NA	<5	<5	<5.0	<5.0	NA	<5	<5
Selenium-Dissolved	<5.0	NA	NA	NA	NA	<5.0	<5.0	NA	NA	NA
Silver	<0.20	NA	NA	**0.58**	<0.5	<0.20	<0.20	NA	<0.5	<0.5
Silver-Dissolved	<0.20	NA	NA	NA	NA	<0.20	<0.20	NA	NA	NA
Sodium	15,000	21,800	22,000	23,000	22,000	38,000	34,000	13,800	46,000	33,000
Sodium-Dissolved	8,800	21,500	19,500	NA	NA	38,000	35,000	13,300	NA	NA
Thallium	<2.0 *F5	NA	NA	<2	<2	<2.0	<2.0	NA	<2	<2
Thallium-Dissolved	<2.0 *F5	NA	NA	NA	NA	<2.0	<2.0	NA	NA	NA
Titanium	1.4 B	NA	NA	<50	<50	<50	36 B	NA	<50	<50
Titanium-Dissolved	<50	NA	NA	NA	NA	<50	<50	NA	NA	NA
Vanadium	1.2 B	NA	NA	<20	<20	<20	2.8 B	NA	<20	<20
Vanadium-Dissolved	1.2 B	NA	NA	NA	NA	<20	0.54 B	NA	NA	NA
Zinc	8.7 B	NA	NA	24	<20	<20	13 B	NA	<20	7.5
Zinc-Dissolved	3.9 B	NA	NA	NA	NA	<20	8.1 B	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-18			GM-19		GM-20		GM-21			
Top of Screen Depth (ft bls)	50	50	50	46	46	42	42	5	5	5	5
Sample Date	12/04/97	12/04/97	11/07/98	12/04/97	12/04/97	12/05/97	12/05/97	12/03/97	12/03/97	12/03/97	12/03/97
Sample ID	GM-18	GM-18 RE	GWGM-18	GM19	GM19 RE	GM-20	GM-20 RE	GM-21	GM-21 RE	GM-95	GM-95 RE
Aluminum	1,070	NA	<200	2,650	NA	74,100	NA	<100	NA	<100	NA
Aluminum-Dissolved	<100	NA	NA	<100	NA	25,600	NA	<100	NA	<100	NA
Antimony	<5	NA	<50	<5	NA	<5	NA	<5	NA	<5	NA
Antimony-Dissolved	<5	NA	NA	<5	NA	<5	NA	<5	NA	<5	NA
Arsenic	<5	NA	<5	<5	NA	14.7	NA	<5	NA	<5	NA
Arsenic-Dissolved	<5	NA	NA	<5	NA	<5	NA	<5	NA	<5	NA
Barium	<200	NA	<200	<200	NA	**529**	NA	<200	NA	<200	NA
Barium-Dissolved	<200	NA	NA	<200	NA	<200	NA	<200	NA	<200	NA
Beryllium	<5	NA	<5	<5	NA	<5	NA	<5	NA	<5	NA
Beryllium-Dissolved	<5	NA	NA	<5	NA	<5	NA	<5	NA	<5	NA
Cadmium	<0.5	NA	<0.5	<0.5	NA	**6.5**	NA	<0.5	NA	<0.5	NA
Cadmium-Dissolved	<0.5	NA	NA	<0.5	NA	**7.2**	NA	<0.5	NA	<0.5	NA
Calcium	53,000	NA	56,000	102,000	NA	149,000	NA	132,000	NA	144,000	NA
Calcium-Dissolved	54,700	NA	NA	104,000	NA	140,000	NA	133,000	NA	138,000	NA
Chromium	<50	NA	<50	***52***	NA	***94***	NA	<50	NA	<50	NA
Chromium-Dissolved	<50	NA	NA	<50	NA	<50	NA	<50	NA	<50	NA
Cobalt	<50	NA	<50	<50	NA	**311**	NA	<50	NA	<50	NA
Cobalt-Dissolved	<50	NA	NA	<50	NA	**288**	NA	<50	NA	<50	NA
Copper	<25	NA	<25	<25	NA	***1,540***	NA	<25	NA	<25	NA
Copper-Dissolved	<25	NA	NA	<25	NA	***1,160***	NA	<25	NA	<25	NA
Iron	1,680	NA	<20	3,500	NA	53,900	NA	1,790	NA	1,860	NA
Iron-Dissolved	<100	NA	NA	<100	NA	1,950	NA	1,750	NA	<100	NA
Lead	<3	NA	<3	<3	NA	**17**	NA	<3	NA	<3	NA
Lead-Dissolved	<3	NA	NA	<3	NA	<3	NA	<3	NA	<3	NA
Magnesium	19,900	NA	22,000	33,400	NA	74,900	NA	53,900	NA	57,800	NA
Magnesium-Dissolved	21,500	NA	NA	32,700	NA	56,000	NA	53,900	NA	55,500	NA
Manganese	89.4	NA	<5	226	NA	1,570	NA	1,250	NA	1,310	NA
Manganese-Dissolved	41.2	NA	NA	164	NA	1,110	NA	1,230	NA	1,270	NA
Mercury	<0.2	NA	<0.2	<0.2	NA	<0.2	NA	<0.2	NA	<0.2	NA
Mercury-Dissolved	<0.2	NA	NA	<0.2	NA	<0.2	NA	<0.2	NA	<0.2	NA
Molybdenum	NA	NA	<100	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-18			GM-19		GM-20		GM-21			
Top of Screen Depth (ft bls)	50	50	50	46	46	42	42	5	5	5	5
Sample Date	12/04/97	12/04/97	11/07/98	12/04/97	12/04/97	12/05/97	12/05/97	12/03/97	12/03/97	12/03/97	12/03/97
Sample ID	GM-18	GM-18 RE	GWGM-18	GM19	GM19 RE	GM-20	GM-20 RE	GM-21	GM-21 RE	GM-95	GM-95 RE
Nickel	<50	NA	<50	<50	NA	604	NA	<50	NA	<50	NA
Nickel-Dissolved	<50	NA	NA	<50	NA	538	NA	<50	NA	<50	NA
Potassium	<5,000	NA	1,400	<5,000	NA	14,400	NA	8,630	NA	9,830	NA
Potassium-Dissolved	<5,000	NA	NA	<5,000	NA	9,180	NA	9,170	NA	9,190	NA
Selenium	<5	NA	<5	<5	NA	<5	NA	<5	NA	<5	NA
Selenium-Dissolved	<5	NA	NA	<5	NA	<5	NA	<5	NA	<5	NA
Silver	<0.5	NA	<0.5	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	NA
Silver-Dissolved	<0.5	NA	NA	<0.5	NA	<0.5	NA	<0.5	NA	<0.5	NA
Sodium	5,510	NA	2,200	<5,000	NA	10,000	NA	13,200	NA	14,100	NA
Sodium-Dissolved	<5,000	NA	NA	<5,000	NA	7,190	NA	13,200	NA	14,200	NA
Thallium	<2	NA	<2	<2	NA	<2	NA	<2	NA	<2	NA
Thallium-Dissolved	<2	NA	NA	<2	NA	<2	NA	<2	NA	<2	NA
Titanium	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	<20	NA	<20	<20	NA	149	NA	<20	NA	<20	NA
Vanadium-Dissolved	<20	NA	NA	<20	NA	<20	NA	<20	NA	<20	NA
Zinc	NA	<20 *	<20	NA	85	NA	***897 ****	NA	<20 *	NA	22.1
Zinc-Dissolved	NA	<20 *	NA	NA	97.4	NA	***660 ****	NA	<20 *	NA	89.7

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-21 (continued)			GM-22					
Top of Screen Depth (ft bls)	5	5	5	6	6	6	6	6	6
Sample Date	10/13/98	01/29/01	09/09/05	12/05/97	12/05/97	10/10/98	04/13/99	01/15/01	09/08/05
Sample ID	GWGM-21	GWGM-21	GWGM-21 (9/9/05)	GM-22	GM-22 RE	GWGM-22	GWGM-22	GWGM-22	GWGM-22(9/8/05)
Aluminum	<200	<33	12 J	1,540	NA	<200	<200	<45	59 J
Aluminum-Dissolved	NA	<35	12 J	<100	NA	NA	NA	<42	<200
Antimony	<50	<50	<50	<5	NA	<50	<50	<50 J	<50
Antimony-Dissolved	NA	NA	<50	<5	NA	NA	NA	<50	<50
Arsenic	<5	<20	1.3 J B	5.1	NA	<5	<5 J	<20	<20
Arsenic-Dissolved	NA	<20	1.0 J	<5	NA	NA	NA	<20 J	<20
Barium	<200	69 B	34 J	<200	NA	<200	<200	55 B	22 J
Barium-Dissolved	NA	61 B	33 J	<200	NA	NA	NA	51 B	19 J
Beryllium	<5	<1.0	<1.0	<5	NA	<5	<5	<1.0	<1.0
Beryllium-Dissolved	NA	NA	<1.0	<5	NA	NA	NA	<1.0	<1.0
Cadmium	<0.5	<0.50 J	<0.50	3	NA	<0.5	<0.5	<0.12	<0.50
Cadmium-Dissolved	NA	<0.50	<0.50	<0.5	NA	NA	NA	<0.50	<0.50
Calcium	120,000	210,000	140,000	59,700	NA	71,000	110,000	120,000	81,000
Calcium-Dissolved	NA	190,000	140,000	56,900	NA	NA	NA	110,000	81,000
Chromium	<50	<5.0	<5.0	<50	NA	<50	<50	17	<5.0
Chromium-Dissolved	NA	<5.0	<5.0	<50	NA	NA	NA	<5.0	<5.0
Cobalt	<50	1.3 B	2.5 J	<50	NA	<50	<50	2.4 B	0.69 J
Cobalt-Dissolved	NA	NA	2.4 J	<50	NA	NA	NA	2.2 B	0.43 J
Copper	<25	<5.1	1.8 J B	<25	NA	<25	<25	<2.9	2.6 J B
Copper-Dissolved	NA	5.1 B	1.5 J	<25	NA	NA	NA	<1.9	1.6 J
Iron	2,800	490 J	2,400	2,080	NA	<20	890	8,400	430
Iron-Dissolved	NA	310 J	2,300	<100	NA	NA	NA	7,400	110
Lead	<3	<3.0	<3.0	<3	NA	<3	<3	<3.0	<3.0
Lead-Dissolved	NA	<3.0	<3.0	<3	NA	NA	NA	<3.0	<3.0
Magnesium	53,000	62,000	58,000	27,000	NA	33,000	57,000	64,000	38,000
Magnesium-Dissolved	NA	59,000	56,000	24,700	NA	NA	NA	61,000	38,000
Manganese	1,600	970	1,600	360	NA	22	1,400	2,900	300
Manganese-Dissolved	NA	610	1,700	335	NA	NA	NA	2,700	190
Mercury	<0.2	<0.20	<0.20	<0.2	NA	<0.2	<0.2	<0.20	<0.20
Mercury-Dissolved	NA	<0.20	0.16 J	<0.2	NA	NA	NA	<0.20	<0.20
Molybdenum	<100	<10	<10	NA	NA	<100	<100	<10	<10
Molybdenum-Dissolved	NA	<10	<10	NA	NA	NA	NA	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-21 (continued)			GM-22					
Top of Screen Depth (ft bls)	5	5	5	6	6	6	6	6	6
Sample Date	10/13/98	01/29/01	09/09/05	12/05/97	12/05/97	10/10/98	04/13/99	01/15/01	09/08/05
Sample ID	GWGM-21	GWGM-21	GWGM-21 (9/9/05)	GM-22	GM-22 RE	GWGM-22	GWGM-22	GWGM-22	GWGM-22(9/8/05)
Nickel	<50	1.7 B	1.7 J B	<50	NA	<50	<50	12 B	2.7 J B
Nickel-Dissolved	NA	NA	1.6 J	<50	NA	NA	NA	6.3 B	2.3 J
Potassium	4,900	43,000	11,000	<5,000	NA	1,400	860	1,100	1,000
Potassium-Dissolved	NA	39,000 J	11,000	<5,000	NA	NA	NA	1,000	1,200
Selenium	<5	<5.0	<5.0	<5	NA	<5	<5	<5.0 J	0.57 J
Selenium-Dissolved	NA	<5.0	<5.0	<5	NA	NA	NA	<5.0 J	0.68 J
Silver	<0.5	<0.20	<0.20	<0.5	NA	<0.5	<0.5	<0.20 J	<0.20
Silver-Dissolved	NA	<0.20	<0.20	<0.5	NA	NA	NA	<0.20 W	<0.20
Sodium	14,000	15,000	13,000	6,300	NA	10,000	24,000	44,000	12,000
Sodium-Dissolved	NA	14,000	13,000	<5,000	NA	NA	NA	42,000	9,900
Thallium	<2	<2.0	<2.0	<2	NA	<2	<2	<2.0	<2.0
Thallium-Dissolved	NA	<2.0 W	<2.0	<2	NA	NA	NA	<2.0	<2.0
Titanium	<50	<0.42	2.3 J	NA	NA	<50	<50	<1.0 J	4.2 J
Titanium-Dissolved	NA	<50	2.6 J	NA	NA	NA	NA	<0.34 J	1.6 J
Vanadium	<20	<20	<20	<20	NA	<20	<20	<20	<20
Vanadium-Dissolved	NA	<20	<20	<20	NA	NA	NA	<20	<20
Zinc	<20	<3.6	<20	NA	35.8 *	<20	<20	29	<20
Zinc-Dissolved	NA	<4.5	<20	NA	53.8 *	NA	NA	<3.6	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-22 (continued)	GM-23					
Top of Screen Depth (ft bls)	6	3.5	3.5	3.5	3.5	3.5	3.5
Sample Date	09/08/05	12/03/97	12/03/97	10/10/98	01/16/01	05/12/04	05/12/04
Sample ID	GWGM-999 (GM-22) (9/8/05)	GM-23	GM-23 RE	GWGM-23	GWGM-23	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)
Aluminum	60 J	27,200	NA	<200	1,300 J	77 B	68 B
Aluminum-Dissolved	<200	<100	NA	NA	<28	<200	<200
Antimony	1.8 J	<5	NA	<50	<50	<50	<50
Antimony-Dissolved	1.5 J	<5	NA	NA	<50	<50	<50
Arsenic	1.3 J B	9.3	NA	<5	<20 J	<20	<20
Arsenic-Dissolved	<20	<5	NA	NA	<20 J	<20	<20
Barium	22 J	232	NA	<200	21 B	7.2 B	7.1 B
Barium-Dissolved	18 J	<200	NA	NA	13 B	5.9 B	6.7 B
Beryllium	<1.0	<5	NA	<5	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<5	NA	NA	<1.0	<1.0	<1.0
Cadmium	<0.50	<0.5	NA	<0.5	<0.10	<0.50	<0.50
Cadmium-Dissolved	<0.50	<0.5	NA	NA	<0.11	<0.50	<0.50
Calcium	83,000	173,000	NA	87,000	73,000	48,000	48,000
Calcium-Dissolved	79,000	82,800	NA	NA	67,000	43,000	50,000
Chromium	<5.0	***61.1***	NA	<50	<2.3	<5.0	<5.0
Chromium-Dissolved	<5.0	<50	NA	NA	<5.0	<5.0	<5.0
Cobalt	0.64 J	<50	NA	<50	0.86 B	<10	<10
Cobalt-Dissolved	0.48 J	<50	NA	NA	<10	<10	<10
Copper	2.0 J B	***51.8***	NA	<25	<7.6	2.9 B	2.8 B
Copper-Dissolved	0.94 J	<25	NA	NA	<2.2	2.4 B	4.6 B
Iron	400	47,900	NA	59	1,700	180	160
Iron-Dissolved	120	198	NA	NA	28 B	<100	22 B
Lead	<3.0	**15.6**	NA	<3	<3.0	<3.0	<3.0
Lead-Dissolved	<3.0	<3	NA	NA	<3.0	<3.0	<3.0
Magnesium	38,000	83,500	NA	39,000	41,000	27,000	27,000
Magnesium-Dissolved	37,000	35,200	NA	NA	37,000	24,000	28,000
Manganese	290	1390	NA	300	65	2.8 B	2.4 B
Manganese-Dissolved	200	276	NA	NA	38	<20	<20
Mercury	<0.20	<0.2	NA	<0.2	<0.20	<0.20	<0.20
Mercury-Dissolved	0.27	<0.2	NA	NA	<0.20	<0.20	<0.20
Molybdenum	<10	NA	NA	<100	<10	<10	<10
Molybdenum-Dissolved	<10	NA	NA	NA	<10	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-22 (continued)	GM-23					
Top of Screen Depth (ft bls)	6	3.5	3.5	3.5	3.5	3.5	3.5
Sample Date	09/08/05	12/03/97	12/03/97	10/10/98	01/16/01	05/12/04	05/12/04
Sample ID	GWGM-999 (GM-22) (9/8/05)	GM-23	GM-23 RE	GWGM-23	GWGM-23	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)
Nickel	2.4 J B	52.6	NA	<50	2.8 B	<25	<25
Nickel-Dissolved	1.9 J	<50	NA	NA	<25	<25	<25
Potassium	1,100	8,570	NA	1,400	1,000	370	370
Potassium-Dissolved	1,100	<5,000	NA	NA	540	310	350
Selenium	1.1 J	<5	NA	<5	<5.0 J	<5.0	<5.0
Selenium-Dissolved	0.62 J	<5	NA	NA	<5.0 J	<5.0	<5.0
Silver	<0.20	<0.5	NA	<0.5	<0.20	<0.20	<0.20
Silver-Dissolved	<0.20	<0.5	NA	NA	<0.20	<0.20	<0.20
Sodium	11,000	8140	NA	3,800	5,300	7,400	7,300
Sodium-Dissolved	9,800	<5,000	NA	NA	4,700	6,500	7,300
Thallium	<2.0	<2	NA	<2	<2.0	<2.0	<2.0
Thallium-Dissolved	<2.0	<2	NA	NA	<2.0	<2.0	<2.0
Titanium	4.3 J	NA	NA	<50	54 J	4.1 B	3.8 B
Titanium-Dissolved	1.5 J	NA	NA	NA	<50 J	<50	<50
Vanadium	<20	83.4	NA	<20	<4.3	0.68 B	0.85 B
Vanadium-Dissolved	<20	<20	NA	NA	<20	<20	0.69 B
Zinc	<20	NA	145 *	<20	12 B	5.0 B	5.7 B
Zinc-Dissolved	<20	NA	<20 *	NA	<5.3	2.3 B	3.4 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-23 (continued)	GM-24A		GM-24B				GM-24C
Top of Screen Depth (ft bls)	3.5	71	71	104	104	104	104	193
Sample Date	09/08/05	11/09/98	05/04/99	11/17/98	11/17/98	05/05/99	04/29/04	11/20/98
Sample ID	GWGM-23(9/8/05)	GWGM-24A	GWGM-24A	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24C
Aluminum	510	<200	<200	<200	<200	<200	33 B	<200
Aluminum-Dissolved	<200	NA	NA	NA	NA	NA	11 B	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	1.6 J	NA	NA	NA	NA	NA	<50	NA
Arsenic	0.81 J B	<5	<5	<5	<5	<5	2.5 B	<5
Arsenic-Dissolved	<20	NA	NA	NA	NA	NA	<20	NA
Barium	25 J	<200	<200	<200	<200	<200 J	90 B	<200
Barium-Dissolved	21 J	NA	NA	NA	NA	NA	87 B	NA
Beryllium	<1.0	<5	<5	<5	<5	<5	<1.0	<5
Beryllium-Dissolved	<1.0	NA	NA	NA	NA	NA	<1.0	NA
Cadmium	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.5
Cadmium-Dissolved	<0.50	NA	NA	NA	NA	NA	<0.50	NA
Calcium	87,000	39,000	46000	61,000	62,000	58000 J	79,000	36,000 J
Calcium-Dissolved	87,000	NA	NA	NA	NA	NA	77,000	NA
Chromium	<5.0	<50	<50	<50	<50	<50 J	5.5	<50
Chromium-Dissolved	<5.0	NA	NA	NA	NA	NA	<5.0	NA
Cobalt	0.40 J	<50	<50	<50	<50	<50 J	<10	<50
Cobalt-Dissolved	0.22 J	NA	NA	NA	NA	NA	<10	NA
Copper	3.9 J B	<25	<25	<25	<25	<25 J	2.0 B	<25
Copper-Dissolved	1.2 J	NA	NA	NA	NA	NA	<25	NA
Iron	890	170	600	98 J	75 J	56	480	<20
Iron-Dissolved	81 J	NA	NA	NA	NA	NA	360	NA
Lead	<3.0	<3	<3	<3	<3	<3	<3.0	<3
Lead-Dissolved	<3.0	NA	NA	NA	NA	NA	<3.0	NA
Magnesium	43,000	18,000	19,000	30,000	31,000	29,000	20,000	19,000 J
Magnesium-Dissolved	44,000	NA	NA	NA	NA	NA	19,000	NA
Manganese	140	440	320	250	260	170 J	290	160 J
Manganese-Dissolved	110	NA	NA	NA	NA	NA	280	NA
Mercury	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2
Mercury-Dissolved	<0.20	NA	NA	NA	NA	NA	<0.20	NA
Molybdenum	<10	<100	<100	<100	<100	<100	1.9 B	<100
Molybdenum-Dissolved	<10	NA	NA	NA	NA	NA	1.7 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-23 (continued)	GM-24A		GM-24B				GM-24C
Top of Screen Depth (ft bls)	3.5	71	71	104	104	104	104	193
Sample Date	09/08/05	11/09/98	05/04/99	11/17/98	11/17/98	05/05/99	04/29/04	11/20/98
Sample ID	GWGM-23(9/8/05)	GWGM-24A	GWGM-24A	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24C
Nickel	0.92 J B	<50	<50	<50	<50	<50 J	3.9 B	<50
Nickel-Dissolved	1.9 J	NA	NA	NA	NA	NA	3.6 B	NA
Potassium	1,000	2,100	2,000	2,400	2,400	2,100	3,400	3,000 J
Potassium-Dissolved	880	NA	NA	NA	NA	NA	3,300	NA
Selenium	<5.0	<5	<5	<5	<5	<5	<5.0	<5
Selenium-Dissolved	<5.0	NA	NA	NA	NA	NA	<5.0	NA
Silver	<0.20	<0.5	<0.5	<0.5	**0.55**	<0.5	<0.20	<0.5
Silver-Dissolved	<0.20	NA	NA	NA	NA	NA	<0.20	NA
Sodium	4,600	18,000	3,300	6,300	6,400	5600 J	7,500	6,000 J
Sodium-Dissolved	4,600	NA	NA	NA	NA	NA	7,400	NA
Thallium	<2.0	<2	<2	<2	<2	<2	<2.0	<2
Thallium-Dissolved	<2.0	NA	NA	NA	NA	NA	<2.0	NA
Titanium	24 J	<50	<50	<50	<50	<50	1.5 B	<50
Titanium-Dissolved	1.5 J	NA	NA	NA	NA	NA	<50	NA
Vanadium	3.5 J	<20	<20	<20	<20	<20	1.3 B	<20
Vanadium-Dissolved	<20	NA	NA	NA	NA	NA	0.90 B	NA
Zinc	<20	<20	<20	<20	<20	<20 J	2.6 B	20
Zinc-Dissolved	<20	NA	NA	NA	NA	NA	2.8 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C (continued)				GM-25A				
Top of Screen Depth (ft bls)	193	193	193	193	19	19	19	19	19
Sample Date	11/20/98	05/13/99	09/24/03	04/29/04	10/06/98	04/16/99	12/01/99	08/21/00	09/09/03
Sample ID	GWGM-93	GWGM-24C	GM-24C	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GM-25A	GWGM-25A	GM-25A
Aluminum	<200	<200	2,500	100 B	<200	<200	27 B	NA	<200
Aluminum-Dissolved	NA	NA	<200	<200	NA	NA	NA	NA	<200
Antimony	<50	<50	<50	<50	<50	<50	<50	NA	<50
Antimony-Dissolved	NA	NA	<50	<50	NA	NA	NA	NA	<50
Arsenic	<5	<5	<20	<20	55	57 J	56	NA	52
Arsenic-Dissolved	NA	NA	<20	2.8 B	NA	NA	NA	NA	51
Barium	<200	<200	<100	33 B	**640**	**620**	**660**	NA	**570**
Barium-Dissolved	NA	NA	<100	30 B	NA	NA	NA	NA	**560**
Beryllium	<5	<5	<1.0	<1.0	<5	<5	<1.0	NA	<1.0
Beryllium-Dissolved	NA	NA	<1.0	<1.0	NA	NA	NA	NA	<1.0
Cadmium	<0.5	<0.5	<0.50	<0.50	<0.5	<0.5	<0.50 W	NA	<0.50 WN
Cadmium-Dissolved	NA	NA	<0.50	<0.50	NA	NA	NA	NA	<0.50 WN
Calcium	37,000 J	21,000	34,000	22,000	170,000	180,000	170,000	NA	150,000
Calcium-Dissolved	NA	NA	20,000	20,000	NA	NA	NA	170,000	140,000
Chromium	<50	<50	8.3	1.6 B	<50	<50	1.9 B	NA	<5.0
Chromium-Dissolved	NA	NA	5.1	<5.0	NA	NA	NA	NA	<5.0
Cobalt	<50	<50	<10	<10	<50	<50	3.5 B	NA	<10
Cobalt-Dissolved	NA	NA	<10	<10	NA	NA	NA	NA	<10
Copper	<25	<25	<25	1.4 B	<25	<25	<25	NA	<25
Copper-Dissolved	NA	NA	<25	<25	NA	NA	NA	NA	<25
Iron	<20	<20	3,800	190	29,000	28,000	28,000	NA	24,000
Iron-Dissolved	NA	NA	<100	<100	NA	NA	NA	31,000	23,000
Lead	<3	<3	<3.0	<3.0	<3	<3	<3.0	NA	<3.0
Lead-Dissolved	NA	NA	<3.0	<3.0	NA	NA	NA	NA	<3.0
Magnesium	19,000 J	12,000	17,000	11,000	250,000	220,000	230,000	NA	180,000
Magnesium-Dissolved	NA	NA	11,000	10,000	NA	NA	NA	250,000	180,000
Manganese	170 J	44	170	39	180	190	170	NA	200
Manganese-Dissolved	NA	NA	25	23	NA	NA	NA	NA	190
Mercury	<0.2	<0.2	<0.20	<0.20	0.2	<0.2	<0.20	NA	<0.20
Mercury-Dissolved	NA	NA	<0.20	<0.20	NA	NA	NA	NA	<0.20
Molybdenum	<100	<100	24	20	<100	<100	<10	NA	<10
Molybdenum-Dissolved	NA	NA	23	21	NA	NA	NA	NA	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C (continued)				GM-25A				
Top of Screen Depth (ft bls)	193	193	193	193	19	19	19	19	19
Sample Date	11/20/98	05/13/99	09/24/03	04/29/04	10/06/98	04/16/99	12/01/99	08/21/00	09/09/03
Sample ID	GWGM-93	GWGM-24C	GM-24C	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GM-25A	GWGM-25A	GM-25A
Nickel	<50	<50	<25	2.1 B	<50	<50	2.7 B	NA	<25
Nickel-Dissolved	NA	NA	<25	1.9 B	NA	NA	NA	NA	<25
Potassium	3,000 J	11,000	13,000	12,000	6,000	5,600	6,300	NA	5,800
Potassium-Dissolved	NA	NA	12,000	12,000	NA	NA	NA	7,000	5,700
Selenium	<5	<5	<5.0	<5.0	<5	<5	<5.0	NA	<5.0
Selenium-Dissolved	NA	NA	<5.0	<5.0	NA	NA	NA	NA	<5.0
Silver	<0.5	<52	<0.20	<0.20	<0.5	<0.5	<0.20	NA	<0.20 WN
Silver-Dissolved	NA	NA	<0.20	**0.11 B**	NA	NA	NA	NA	<0.20 WN
Sodium	6,100 J	29,000	35,000	34,000	24,000	23,000	24,000	NA	19,000
Sodium-Dissolved	NA	NA	33,000	33,000	NA	NA	NA	25,000 J	19,000
Thallium	<2	<2	<2.0	<2.0	<2	<2	<2.0 W	NA	<2.0 WN
Thallium-Dissolved	NA	NA	<2.0	<2.0	NA	NA	NA	NA	<2.0 WN
Titanium	<50	<50	200	3.2 B	<50	<50	11 B	NA	<50
Titanium-Dissolved	NA	NA	<50	<50	NA	NA	NA	NA	<50
Vanadium	<20	<20	<20	0.66 B	<20	<20	10 B	NA	<20
Vanadium-Dissolved	NA	NA	<20	<20	NA	NA	NA	NA	<20
Zinc	<20	<20	21	4.2 B	24	<20	2.1 B	NA	<20
Zinc-Dissolved	NA	NA	<20	<20	NA	NA	NA	NA	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25A (continued)	GM-25B						
Top of Screen Depth (ft bls)	19	98	98	98	98	98	98	98
Sample Date	05/12/04	10/06/98	04/27/99	10/20/99	04/17/00	09/09/03	05/18/04	09/09/03
Sample ID	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GM-25B	GWGM-25B	GM-25B	GWGM-25B (5/18/04)	GM-25B-DL
Aluminum	<200	<200	<200	84 B	NA	<200	<1,000	NA
Aluminum-Dissolved	<200	NA	NA	NA	NA	<200	<1,000	NA
Antimony	<50	<50	<50	4.0 B	NA	<50	<250	NA
Antimony-Dissolved	<50	NA	NA	NA	NA	2.9 B	<250	NA
Arsenic	48	65	110	66	NA	59	62 B	NA
Arsenic-Dissolved	39	NA	NA	NA	NA	60	57 B	NA
Barium	**530**	**2,300**	**2,200**	***2,600***	NA	**2,300**	**2,100**	NA
Barium-Dissolved	**510**	NA	NA	NA	NA	**2,300**	**2,100**	NA
Beryllium	<1.0	<5	<5	<1.0	NA	<1.0	<5.0	NA
Beryllium-Dissolved	<1.0	NA	NA	NA	NA	0.16 B	<5.0	NA
Cadmium	<0.50	<0.5	<1 M	<0.50	NA	<0.50 WN	<0.50	NA
Cadmium-Dissolved	<0.50	NA	NA	NA	NA	<0.50 WN	<0.50	NA
Calcium	140,000	680,000	750,000	740,000	760,000	NA	790,000	780,000
Calcium-Dissolved	140,000	NA	NA	NA	770,000	NA	780,000	770,000
Chromium	1.3 B	<50	<50	**18**	NA	**20**	**19 B**	NA
Chromium-Dissolved	1.3 B	NA	NA	NA	NA	**20**	**18 B**	NA
Cobalt	2.5 B	<50	<50	20	NA	16	16 B	NA
Cobalt-Dissolved	2.5 B	NA	NA	NA	NA	16	17 B	NA
Copper	<25	***61***	<25	2.5 B	NA	<25	<120	NA
Copper-Dissolved	3.3 B	NA	NA	NA	NA	1.7 B	<120	NA
Iron	23,000	110,000	110,000	120,000	110,000	110,000	110,000	NA
Iron-Dissolved	21,000	NA	NA	NA	18,000	110,000	110,000	NA
Lead	<3.0	<3	<10 M	<3.0	NA	<3.0	<15	NA
Lead-Dissolved	<3.0	NA	NA	NA	NA	<3.0	<15	NA
Magnesium	170,000	520,000	530,000	570,000	570,000	NA	540,000	540,000
Magnesium-Dissolved	160,000	NA	NA	NA	590,000	NA	540,000	530,000
Manganese	200	190	190	190	NA	NA	170	180
Manganese-Dissolved	200	NA	NA	NA	NA	NA	170	180
Mercury	<0.20	<0.2	<0.2	<0.20	NA	<0.20	<0.20	NA
Mercury-Dissolved	<0.20	NA	NA	NA	NA	<0.20	<0.20	NA
Molybdenum	<10	<100	<100	<10	NA	<10	<50	NA
Molybdenum-Dissolved	<10	NA	NA	NA	NA	<10	<50	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25A (continued)	GM-25B						
Top of Screen Depth (ft bls)	19	98	98	98	98	98	98	98
Sample Date	05/12/04	10/06/98	04/27/99	10/20/99	04/17/00	09/09/03	05/18/04	09/09/03
Sample ID	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GM-25B	GWGM-25B	GM-25B	GWGM-25B (5/18/04)	GM-25B-DL
Nickel	2.6 B	**78**	**80**	**93**	NA	**68**	**71 B**	NA
Nickel-Dissolved	2.8 B	NA	NA	NA	NA	**68**	**71 B**	NA
Potassium	6,300	12,000	11,000	15,000	NA	15,000	13,000	NA
Potassium-Dissolved	6,200	NA	NA	NA	NA	15,000	13,000	NA
Selenium	<5.0	<5	<5	**7.8**	NA	<5.0	<25	NA
Selenium-Dissolved	<5.0	NA	NA	NA	NA	2.7 B	<25	NA
Silver	<0.20	<0.5	<2.5 M	<0.20	NA	<0.20 WN	<0.20	NA
Silver-Dissolved	<0.20	NA	NA	NA	NA	<0.20 WN	<0.20	NA
Sodium	18,000	56,000	54,000	57,000	NA	NA	54,000	62,000
Sodium-Dissolved	18,000	NA	NA	NA	NA	NA	54,000	61,000
Thallium	0.40 B	<2	<5 M	<2.0	NA	<2.0 WN	<2.0	NA
Thallium-Dissolved	<2.0	NA	NA	NA	NA	<2.0 WN	0.50 B	NA
Titanium	9.4 B	950	980	1,100	NA	NA	1,400	1,500
Titanium-Dissolved	7.6 B	NA	NA	NA	NA	NA	1,400	1,400
Vanadium	6.3 B	**35**	**21**	**27**	NA	NA	**16 B**	**28**
Vanadium-Dissolved	5.8 B	NA	NA	NA	NA	NA	**21 B**	**30**
Zinc	3.1 B	<200 M	<20	25	NA	<20	16 B	NA
Zinc-Dissolved	4.4 B	NA	NA	NA	NA	4.5 B	18 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C							
Top of Screen Depth (ft bls)	206	206	206	206	206	206	206	206
Sample Date	11/09/98	11/09/98	04/20/99	08/02/00	09/15/03	05/04/04	08/01/05	09/15/03
Sample ID	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C	GM-25C	GWGM-25C (5/4/04)	GWGM-25C (08/01/05)	GM-25C-DL
Aluminum	<200	<200	<200	NA	<200	75 B	<200	NA
Aluminum-Dissolved	NA	NA	NA	<28	<200	28 B	<200	NA
Antimony	<50	<50	<50	NA	<50	<50	<50	NA
Antimony-Dissolved	NA	NA	NA	<50	<50	<50	<50	NA
Arsenic	26	25	<5	NA	74	100	130	NA
Arsenic-Dissolved	NA	NA	NA	60 J	67	100	130	NA
Barium	<200	<200	<200	NA	<100	46 B	41 J	NA
Barium-Dissolved	NA	NA	NA	40 B	<100	42 B	40 J	NA
Beryllium	<5	<5	<5	NA	<1.0	<1.0	<1.0	NA
Beryllium-Dissolved	NA	NA	NA	<1.0	<1.0	<1.0	<1.0	NA
Cadmium	<0.5	<0.5	<0.5	NA	<0.50 WN	<0.50	0.12 J	NA
Cadmium-Dissolved	NA	NA	NA	<0.50	<0.50 WN	<0.50	<0.50	NA
Calcium	37,000	39,000	37,000	NA	7700	42,000	43,000	NA
Calcium-Dissolved	NA	NA	NA	34,000	6,500	40,000	43,000	NA
Chromium	<50	<50	<50	NA	<5.0	<5.0	<5.0	NA
Chromium-Dissolved	NA	NA	NA	<5.0	<5.0	<5.0	<5.0	NA
Cobalt	<50	<50	<50	NA	<10	<10	0.22 J	NA
Cobalt-Dissolved	NA	NA	NA	<10	<10	<10	0.22 J	NA
Copper	<25	<25	<25	NA	<25	<25	<25	NA
Copper-Dissolved	NA	NA	NA	<25	<25	<25	<25	NA
Iron	160	150	120	NA	<100	820	920	NA
Iron-Dissolved	NA	NA	NA	140 J	<100	580	870	NA
Lead	<3	<3	<3	NA	<3.0	<3.0	0.55 J	NA
Lead-Dissolved	NA	NA	NA	<3.0	<3.0	<3.0	<3.0	NA
Magnesium	22,000	24,000	26,000	NA	27,000	39,000	39,000	NA
Magnesium-Dissolved	NA	NA	NA	28,000	26,000	37,000	42,000	NA
Manganese	200	200	200	NA	<20	170	120	NA
Manganese-Dissolved	NA	NA	NA	190	<20	150	130	NA
Mercury	<0.2	<0.2	<0.2	NA	<0.20	<0.20	<0.20	NA
Mercury-Dissolved	NA	NA	NA	<0.20 J	<0.20	<0.20	<0.20	NA
Molybdenum	<100	<100	<100	NA	16	15	13	NA
Molybdenum-Dissolved	NA	NA	NA	17	15	15	13	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C							
Top of Screen Depth (ft bls)	206	206	206	206	206	206	206	206
Sample Date	11/09/98	11/09/98	04/20/99	08/02/00	09/15/03	05/04/04	08/01/05	09/15/03
Sample ID	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C	GM-25C	GWGM-25C (5/4/04)	GWGM-25C (08/01/05)	GM-25C-DL
Nickel	<50	<50	<50	NA	<25	1.6 B	0.44 J B	NA
Nickel-Dissolved	NA	NA	NA	1.3 B	<25	<25	0.31 J	NA
Potassium	2,600	2,800	3,400	NA	NA	3,500	2,200	41,000
Potassium-Dissolved	NA	NA	NA	9,100	NA	3,400	2,400	41,000
Selenium	<5	<5	<5	NA	<5.0	<5.0	<5.0	NA
Selenium-Dissolved	NA	NA	NA	<5.0 J	<5.0	<5.0	<5.0	NA
Silver	<0.5	<0.5	<0.5	NA	<0.20 WN	<0.20	<0.20	NA
Silver-Dissolved	NA	NA	NA	<0.20 J	<0.20 WN	<0.20	<0.20	NA
Sodium	9,200	10,000	17,000	NA	NA	21,000	18,000	43,000
Sodium-Dissolved	NA	NA	NA	20,000	NA	20,000	19,000	42,000
Thallium	<2	<2	<2	NA	<2.0 WN	<2.0	<2.0	NA
Thallium-Dissolved	NA	NA	NA	<2.0	<2.0 WN	<2.0	NA	NA
Titanium	<50	<50	<50	NA	<50	1.6 B	1.8 J	NA
Titanium-Dissolved	NA	NA	NA	<0.30	<50	<50	1.7 J	NA
Vanadium	<20	<20	<20	NA	<20	1.0 B	<20	NA
Vanadium-Dissolved	NA	NA	NA	<20	<20	0.47 B	<20	NA
Zinc	<20	<20	<20	NA	<20	4.9 B	8.0 J	NA
Zinc-Dissolved	NA	NA	NA	<4.4	<20	2.1 B	5.4 J	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A						GM-26B			
Top of Screen Depth (ft bls)	30	30	30	30	30	30	101	101	101	101
Sample Date	10/07/98	04/14/99	11/29/99	08/16/00	09/09/03	05/13/04	10/07/98	04/15/99	11/30/99	07/18/00
Sample ID	GWGM-26A	GWGM-26A	GM-26A	GWGM-26A	GM-26A	GWGM-26A (5/13/04)	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B
Aluminum	<200	<200	NA	NA	<200	<200	<200	<200	NA	NA
Aluminum-Dissolved	NA	NA	31 B	NA	<200	<200	NA	NA	28 B	<26
Antimony	<50	<50	NA	NA	<50	<50	<50	<50	NA	NA
Antimony-Dissolved	NA	NA	<50	NA	<50	<50	NA	NA	<50	<50
Arsenic	17	34 J	NA	NA	20	31	<5	6.5 J	NA	NA
Arsenic-Dissolved	NA	NA	21	NA	<20	29	NA	NA	7.0 B	8.5 B
Barium	**530**	**740**	NA	NA	**530**	**760**	<200	<200	NA	NA
Barium-Dissolved	NA	NA	**580**	NA	**540**	**750**	NA	NA	53 B	55 B
Beryllium	<5	<5	NA	NA	<1.0	<1.0	<5	<5	NA	NA
Beryllium-Dissolved	NA	NA	<1.0	NA	<1.0	<1.0	NA	NA	<1.0	<1.0
Cadmium	<0.5	<0.5	NA	NA	<0.50 WN	<0.50	<0.5	<0.5	NA	NA
Cadmium-Dissolved	NA	NA	<0.50 W	NA	<0.50 WN	<0.50	NA	NA	<0.50 W	<0.50
Calcium	160,000	210,000	NA	NA	170,000	200,000	36,000	34,000	NA	NA
Calcium-Dissolved	NA	NA	160,000	160,000	170,000	200,000	NA	NA	33,000	32,000
Chromium	<50	<50	NA	NA	<5.0	1.6 B	<50	<50	NA	NA
Chromium-Dissolved	NA	NA	0.98 B	NA	<5.0	1.4 B	NA	NA	<5.0	<5.0
Cobalt	<50	<50	NA	NA	<10	1.0 B	<50	<50	NA	NA
Cobalt-Dissolved	NA	NA	<10	NA	<10	1.0 B	NA	NA	<10	<10
Copper	<25	<25	NA	NA	<25	<25	<25	<25	NA	NA
Copper-Dissolved	NA	NA	<25	NA	<25	<25	NA	NA	<25	<25
Iron	20,000	28,000	NA	NA	17,000	24,000	25	29	NA	NA
Iron-Dissolved	NA	NA	24,000	20,000	17,000	24,000	NA	NA	43 B	93 B
Lead	<3	<3	NA	NA	<3.0	<3.0	<3	<3	NA	NA
Lead-Dissolved	NA	NA	<3.0	NA	<3.0	<3.0	NA	NA	<3.0	<3.0
Magnesium	130,000	200,000	NA	NA	140,000	210,000	20,000	20,000	NA	NA
Magnesium-Dissolved	NA	NA	160,000	160,000	150,000	210,000	NA	NA	20,000	20,000
Manganese	94	81	85	NA	80	97	68	45	41	NA
Manganese-Dissolved	NA	NA	NA	NA	80	97	NA	NA	NA	36
Mercury	<0.2	<0.2	NA	NA	<0.20	<0.20	<0.2	<0.2	NA	NA
Mercury-Dissolved	NA	NA	<0.20	NA	<0.20	<0.20	NA	NA	<0.20	<0.20
Molybdenum	<100	<100	NA	NA	<10	1.1 B	<100	<100	NA	NA
Molybdenum-Dissolved	NA	NA	<10	NA	<10	<10	NA	NA	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A						GM-26B			
Top of Screen Depth (ft bls)	30	30	30	30	30	30	101	101	101	101
Sample Date	10/07/98	04/14/99	11/29/99	08/16/00	09/09/03	05/13/04	10/07/98	04/15/99	11/30/99	07/18/00
Sample ID	GWGM-26A	GWGM-26A	GM-26A	GWGM-26A	GM-26A	GWGM-26A (5/13/04)	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B
Nickel	<50	<50	NA	NA	<25	1.8 B	<50	<50	NA	NA
Nickel-Dissolved	NA	NA	<25	NA	<25	2.4 B	NA	NA	<25	1.5 B
Potassium	3,600	4,400	NA	NA	4,400	5,800	2,600	4,700	NA	NA
Potassium-Dissolved	NA	NA	4,400	4,600	4,600	5,800	NA	NA	5,200	6,400
Selenium	<5	<5	NA	NA	<5.0	<5.0	<5	<5	NA	NA
Selenium-Dissolved	NA	NA	<5.0	NA	<5.0	<5.0	NA	NA	<5.0	<5.0
Silver	<0.5	<0.5	NA	NA	<0.20 WN	<0.20	<0.5	<0.5	NA	NA
Silver-Dissolved	NA	NA	<0.20	NA	<0.20 WN	<0.20	NA	NA	<0.13	<0.20
Sodium	15,000	24,000	NA	NA	15,000	29,000	2,600	3,400	NA	NA
Sodium-Dissolved	NA	NA	20,000	20,000 J	15,000	29,000	NA	NA	4,000	4,900
Thallium	<2	<2	NA	NA	<2.0 WN	<2.0	<2	<2	NA	NA
Thallium-Dissolved	NA	NA	<2.0 J	NA	<2.0 WN	<2.0	NA	NA	<2.0	<2.0
Titanium	<50	<50	NA	NA	<50	16 B	<50	<50	NA	NA
Titanium-Dissolved	NA	NA	7.7 B	NA	<50	14 B	NA	NA	<50	<50
Vanadium	<20	<20	NA	NA	<20	9.2 B	<20	<20	NA	NA
Vanadium-Dissolved	NA	NA	6.3 B	NA	<20	9.2 B	NA	NA	<20	<20
Zinc	<20	<20	NA	NA	<20	3.0 B	<20	<20	NA	NA
Zinc-Dissolved	NA	NA	2.9 B	NA	<20	3.8 B	NA	NA	1.5 B	<1.3

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B (continued)			GM-26C					
Top of Screen Depth (ft bls)	101	101	101	160	160	160	160	160	160
Sample Date	09/09/03	04/27/04	07/28/05	10/25/98	04/17/99	11/30/99	08/16/00	09/16/03	05/18/04
Sample ID	GM-26B	GWGM-26B (4/27/04)	GWGM-26B (072805)	GWGM-26C	GWGM-26C	GM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)
Aluminum	<200	<200	<200	<200	<200	NA	NA	<200	<200
Aluminum-Dissolved	<200	<200	<200	NA	NA	30 B	NA	<200	<200
Antimony	<50	<50	<50	<50	<50	NA	NA	<50	<50
Antimony-Dissolved	<50	<50	19 J	NA	NA	<50	NA	<50	<50
Arsenic	<20	9.4 B	12 J	16	6.4	NA	NA	56	56
Arsenic-Dissolved	<20	8.9 B	8.6 J	NA	NA	28	NA	53	54
Barium	<100	58 B	51 J	340 J	<200	NA	NA	**650**	**680**
Barium-Dissolved	<100	60 B	51 J	NA	NA	**450**	NA	**630**	**670**
Beryllium	<1.0	<1.0	<1.0	<5	<5	NA	NA	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	NA	NA	<1.0	NA	<1.0	<1.0
Cadmium	<0.50 WN	<0.50	<0.50	<0.5	<0.5	NA	NA	<0.50 WN	<0.50
Cadmium-Dissolved	<0.50 WN	<0.50	<0.50	NA	NA	<0.50 W	NA	<0.50 WN	<0.50
Calcium	29,000	29,000	30,000	110,000	91,000	NA	NA	160,000	160,000
Calcium-Dissolved	27,000	30,000	28,000	NA	NA	130,000	150,000	160,000	160,000
Chromium	<5.0	<5.0	<5.0	<50 J	<50	NA	NA	<5.0	2.9 B
Chromium-Dissolved	<5.0	<5.0	5	NA	NA	1.3 B	NA	<5.0	2.6 B
Cobalt	<10	<10	0.57 J	<50 J	<50	NA	NA	<10	6.7 B
Cobalt-Dissolved	<10	<10	0.64 J	NA	NA	2.8 B	NA	<10	6.2 B
Copper	<25	<25	<25	<25 J	***34***	NA	NA	<25	<25
Copper-Dissolved	<25	<25	0.72 J	NA	NA	<25	NA	<25	<25
Iron	<100	74 B	52 J	2,800 J	510	NA	NA	21,000	21,000
Iron-Dissolved	<100	44 B	73 J	NA	NA	8,100	13,000	20,000	21,000
Lead	<3.0	<3.0	<3.0	<3	<3	NA	NA	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	0.54 J	NA	NA	<3.0	NA	<3.0	<3.0
Magnesium	20,000	19,000	21,000	130,000 J	55,000	NA	NA	250,000	280,000
Magnesium-Dissolved	20,000	19,000	19,000	NA	NA	160,000	180,000	240,000	270,000
Manganese	34	35	29	640	63	310	NA	130	120
Manganese-Dissolved	31	35	33	NA	NA	NA	NA	120	120
Mercury	<0.20	<0.20	<0.20	<0.2	<0.2	NA	NA	<0.20	0.084 B
Mercury-Dissolved	<0.20	<0.20	<0.20	NA	NA	<0.20	NA	<0.20	0.10 B
Molybdenum	<10	0.86 B	<10	<100 J	<100	NA	NA	<10	3.7 B
Molybdenum-Dissolved	<10	1.4 B	<10	NA	NA	4.6 B	NA	<10	3.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B (continued)			GM-26C					
Top of Screen Depth (ft bls)	101	101	101	160	160	160	160	160	160
Sample Date	09/09/03	04/27/04	07/28/05	10/25/98	04/17/99	11/30/99	08/16/00	09/16/03	05/18/04
Sample ID	GM-26B	GWGM-26B (4/27/04)	GWGM-26B (072805)	GWGM-26C	GWGM-26C	GM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)
Nickel	<25	3.4 B	2.8 J	<50 J	<50	NA	NA	<25	9.7 B
Nickel-Dissolved	<25	2.2 B	6.3 J	NA	NA	2.1 B	NA	<25	9.0 B
Potassium	12,000	11,000	9,600	6,700	2,500	NA	NA	8,300	8,800
Potassium-Dissolved	12,000	7,800	9,100	NA	NA	6,800	7,100	7,900	8,700
Selenium	<5.0	<5.0	<5.0	<5	<5	NA	NA	<5.0	2.9 B
Selenium-Dissolved	<5.0	<5.0	<5.0	NA	NA	<5.0	NA	<5.0	2.8 B
Silver	<0.20 WN	<0.20	<0.20	<0.5	<0.5	NA	NA	<0.20 WN	<0.20
Silver-Dissolved	<0.20 WN	<0.20	<0.20	NA	NA	<0.20	NA	<0.20 WN	<0.20
Sodium	8,500	7,300	7,500	40,000	5,800	NA	NA	NA	NA
Sodium-Dissolved	8,300	5,400	7,400	NA	NA	46,000	46,000 J	NA	NA
Thallium	<2.0 WN	<2.0	<2.0	<2	<2	NA	NA	<2.0 WN	<2.0
Thallium-Dissolved	<2.0 WN	<2.0	<2.0	NA	NA	<2.0 W	NA	<2.0 WN	<2.0
Titanium	<50	0.98 B	2.1 J	<50 J	<50	NA	NA	<50	18 B
Titanium-Dissolved	<50	<50	1.6 J	NA	NA	2.1 B	NA	<50	16 B
Vanadium	<20	<20	<20	<20 J	<20	NA	NA	<20	**15 B**
Vanadium-Dissolved	<20	<20	<20	NA	NA	8.9 B	NA	<20	**13 B**
Zinc	<20	0.73 B	<20	<20 J	<20	NA	NA	<20	6.6 B
Zinc-Dissolved	<20	<20	8.2 J	NA	NA	5.2 B	NA	<20	6.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26C (continued)				GM-27A		
Top of Screen Depth (ft bls)	160	160	160	160	30	30	30
Sample Date	05/18/04	05/18/04	05/18/04	09/16/03	10/08/98	04/15/99	12/01/99
Sample ID	GWGM-26C (5/18/04)-DL	GWGM-994 (5/18/04)	GWGM-994 (5/18/04)-DL	GM-26C-DL	GWGM-27A	GWGM-27A	GM-27A
Aluminum	NA	<200	NA	NA	<200	<200	29 B
Aluminum-Dissolved	NA	<200	NA	NA	NA	NA	NA
Antimony	NA	<50	NA	NA	<50	<50	<50
Antimony-Dissolved	NA	<50	NA	NA	NA	NA	NA
Arsenic	NA	55	NA	NA	41	42 J	48
Arsenic-Dissolved	NA	57	NA	NA	NA	NA	NA
Barium	NA	**670**	NA	NA	**1,600**	**1,600**	**1,700**
Barium-Dissolved	NA	**680**	NA	NA	NA	NA	NA
Beryllium	NA	<1.0	NA	NA	<5	<5	<1.0
Beryllium-Dissolved	NA	<1.0	NA	NA	NA	NA	NA
Cadmium	NA	<0.50	NA	NA	<0.5	<0.5	<0.50 W
Cadmium-Dissolved	NA	<0.50	NA	NA	NA	NA	NA
Calcium	NA	160,000	NA	NA	220,000	220,000	210,000
Calcium-Dissolved	NA	160,000	NA	NA	NA	NA	NA
Chromium	NA	2.4 B	NA	NA	<50	<50	1.9 B
Chromium-Dissolved	NA	2.3 B	NA	NA	NA	NA	NA
Cobalt	NA	6.5 B	NA	NA	<50	<50	9.3 B
Cobalt-Dissolved	NA	6.6 B	NA	NA	NA	NA	NA
Copper	NA	<25	NA	NA	<25	<25	0.93 B
Copper-Dissolved	NA	<25	NA	NA	NA	NA	NA
Iron	NA	21,000	NA	NA	34,000	36,000	36,000
Iron-Dissolved	NA	21,000	NA	NA	NA	NA	NA
Lead	NA	<3.0	NA	NA	<3	<3	<3.0
Lead-Dissolved	NA	<3.0	NA	NA	NA	NA	NA
Magnesium	NA	270,000	NA	NA	180,000	180,000	180,000
Magnesium-Dissolved	NA	280,000	NA	NA	NA	NA	NA
Manganese	NA	120	NA	NA	300	220	200
Manganese-Dissolved	NA	120	NA	NA	NA	NA	NA
Mercury	NA	<0.20	NA	NA	<0.2	<0.2	<0.20
Mercury-Dissolved	NA	<0.20	NA	NA	NA	NA	NA
Molybdenum	NA	3.6 B	NA	NA	<100	<100	<10
Molybdenum-Dissolved	NA	4.5 B	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26C (continued)				GM-27A		
Top of Screen Depth (ft bls)	160	160	160	160	30	30	30
Sample Date	05/18/04	05/18/04	05/18/04	09/16/03	10/08/98	04/15/99	12/01/99
Sample ID	GWGM-26C (5/18/04)-DL	GWGM-994 (5/18/04)	GWGM-994 (5/18/04)-DL	GM-26C-DL	GWGM-27A	GWGM-27A	GM-27A
Nickel	NA	9.3 B	NA	NA	<50	<50	8.2 B
Nickel-Dissolved	NA	9.1 B	NA	NA	NA	NA	NA
Potassium	NA	8,800	NA	NA	4,800	4,800	5,100
Potassium-Dissolved	NA	8,900	NA	NA	NA	NA	NA
Selenium	NA	<5.0	NA	NA	<5	<5	<5.0
Selenium-Dissolved	NA	<5.0	NA	NA	NA	NA	NA
Silver	NA	<0.20	NA	NA	<0.5	<0.5	<0.20
Silver-Dissolved	NA	<0.20	NA	NA	NA	NA	NA
Sodium	61,000	NA	61,000	60,000	18,000	18,000	18,000
Sodium-Dissolved	61,000	NA	62,000	56,000	NA	NA	NA
Thallium	NA	<2.0	NA	NA	<2	<2	<2.0 W
Thallium-Dissolved	NA	<2.0	NA	NA	NA	NA	NA
Titanium	NA	18 B	NA	NA	<50	<50	12 B
Titanium-Dissolved	NA	17 B	NA	NA	NA	NA	NA
Vanadium	NA	**15 B**	NA	NA	<20	<20	11 B
Vanadium-Dissolved	NA	**14 B**	NA	NA	NA	NA	NA
Zinc	NA	5.3 B	NA	NA	<20	<20	4.5 B
Zinc-Dissolved	NA	5.1 B	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)		GM-27B					
Top of Screen Depth (ft bls)	30	30	145	145	145	145	145	145
Sample Date	09/10/03	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04	04/30/04
Sample ID	GM-27A	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)	GWGM-998 (4/30/04)
Aluminum	<200	<200	<200	<200	NA	<200	28 B	11 B
Aluminum-Dissolved	<200	66 B	NA	NA	<33	<200	<200	<200
Antimony	<50	<50	<50	<50	NA	<50	<50	<50
Antimony-Dissolved	<50	<50	NA	NA	<50	<50	<50	<50
Arsenic	48	45	5.7	20 J	NA	<20	19 B	19 B
Arsenic-Dissolved	47	45	NA	NA	15 B	<20	18 B	18 B
Barium	**1,700**	**1,600**	<200	<200	NA	<100	73 B	74 B
Barium-Dissolved	**1,600**	**1,600**	NA	NA	36 B	<100	72 B	72 B
Beryllium	<1.0	<1.0	<5	<5	NA	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	NA	NA	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50	<0.50	<0.5	<0.5	NA	<0.50	<0.50	<0.50
Cadmium-Dissolved	<0.50	<0.50	NA	NA	<0.50	<0.50	<0.50	<0.50
Calcium	220,000	210,000	31,000	13,000	NA	25,000	26,000	26,000
Calcium-Dissolved	220,000	210,000	NA	NA	17,000	24,000	24,000	24,000
Chromium	<5.0	1.4 B	<50	<50	NA	<5.0	<5.0	<5.0
Chromium-Dissolved	<5.0	1.4 B	NA	NA	<5.0	<5.0	<5.0	<5.0
Cobalt	<10	8.1 B	<50	<50	NA	<10	<10	<10
Cobalt-Dissolved	<10	8.9 B	NA	NA	<10	<10	<10	<10
Copper	<25	<25	<25	<25	NA	<25	<25	<25
Copper-Dissolved	<25	<25	NA	NA	<25	<25	<25	<25
Iron	35,000	32,000	300	21	NA	<100	140	83 B
Iron-Dissolved	33,000	32,000	NA	NA	29 B	<100	43 B	43 B
Lead	<3.0	<3.0	<3	<3	NA	<3.0	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	NA	NA	<3.0	<3.0	<3.0	<3.0
Magnesium	190,000	190,000	21,000	8,800	NA	20,000	19,000	20,000
Magnesium-Dissolved	190,000	180,000	NA	NA	13,000	20,000	19,000	19,000
Manganese	170	160	300	42	NA	43	47	43
Manganese-Dissolved	170	170	NA	NA	34	42	40	40
Mercury	<0.20	<0.20	<0.2	<0.2	NA	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	NA	NA	<0.20	<0.20	<0.20	<0.20
Molybdenum	<10	<10	<100	<100	NA	<10	<10	<10
Molybdenum-Dissolved	<10	1.2 B	NA	NA	2.2 B	<10	1.1 B	1.2 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)		GM-27B					
Top of Screen Depth (ft bls)	30	30	145	145	145	145	145	145
Sample Date	09/10/03	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04	04/30/04
Sample ID	GM-27A	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)	GWGM-998 (4/30/04)
Nickel	<25	8.3 B	<50	<50	NA	<25	<25	<25
Nickel-Dissolved	<25	9.8 B	NA	NA	<25	<25	<25	<25
Potassium	5,500	6,000	2,500	3,500	NA	12,000	9,500	9,600
Potassium-Dissolved	5,300	5,900	NA	NA	28,000	12,000	9,500	9,500
Selenium	<5.0	<5.0	<5	<5	NA	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	NA	NA	<5.0	<5.0	<5.0	<5.0
Silver	<0.20 W	<0.20	<0.5	<0.5	NA	<0.20 W	<0.20	<0.20
Silver-Dissolved	<0.20 W	<0.20	NA	NA	<0.20	<0.20 W	<0.20	<0.20
Sodium	23,000	21,000	33,000	31,000	NA	4,200	4,500	4,600
Sodium-Dissolved	22,000	20,000	NA	NA	7,200	4,200	4,500	4,500
Thallium	<2.0	<2.0	<2	<2	NA	<2.0	<2.0	<2.0
Thallium-Dissolved	<2.0	<2.0	NA	NA	<2.0	<2.0	<2.0	<2.0
Titanium	<50	13 B	<50	<50	NA	<50	1.4 B	0.54 B
Titanium-Dissolved	<50	11 B	NA	NA	<50	<50	<50	<50
Vanadium	<20	9.7 B	<20	<20	NA	<20	<20	<20
Vanadium-Dissolved	<20	9.2 B	NA	NA	<20	<20	<20	<20
Zinc	<20	7.5 B	<20	<20	NA	<20	17 B	5.3 B
Zinc-Dissolved	<20	5.6 B	NA	NA	<1.3	<20	1.0 B	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B		GM-27C					
Top of Screen Depth (ft bls)	145	145	210	210	210	210	210	210
Sample Date	08/05/05	12/7/2006	11/09/98	04/26/99	04/26/99	08/07/00	09/11/03	04/30/04
Sample ID	GWGM-27B (08/05/05)	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C	GM-27C	GWGM-27C (4/30/04)
Aluminum	<200	<200	<200	<200	<200	NA	<200	24 B
Aluminum-Dissolved	<200	13 J	NA	NA	NA	<22	<200	<200
Antimony	<50	<50	<50	<50	<50	NA	<50	<50
Antimony-Dissolved	<50	<50	NA	NA	NA	<50	<50	<50
Arsenic	20	28	13	18	15	NA	23	24
Arsenic-Dissolved	20	32	NA	NA	NA	20 BJ	22	23
Barium	59 J	65 J	<200	<200	<200	NA	<100	23 B
Barium-Dissolved	61 J	71 J B	NA	NA	NA	23 B	<100	22 B
Beryllium	<1.0	<1.0	<5	<5	<5	NA	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	<1.0
Cadmium	<0.50	<0.50	<0.5	<0.5	<0.5	NA	<0.50	<0.50
Cadmium-Dissolved	<0.50	<0.50	NA	NA	NA	<0.50 W	<0.50	<0.50
Calcium	23,000	30000	31,000	30,000	30,000	NA	9,600	34,000
Calcium-Dissolved	23,000	34000	NA	NA	NA	31,000	6,500	33,000
Chromium	<5.0	<5.0	<50	<50	<50	NA	<5.0	<5.0
Chromium-Dissolved	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0
Cobalt	<10	<10	<50	<50	<50	NA	<10	<10
Cobalt-Dissolved	<10	0.12 J	NA	NA	NA	<10	<10	<10
Copper	<25	0.76 J	<25	<25	<25	NA	<25	<25
Copper-Dissolved	<25	0.44 J	NA	NA	NA	<25	<25	<25
Iron	53 J	84 J	89	80	77	NA	<100	110
Iron-Dissolved	47 J	91 J	NA	NA	NA	<22	20 B	72 B
Lead	<3.0	<3.0	<3	<3	<3	NA	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	NA	NA	NA	<3.0	<3.0	<3.0
Magnesium	17,000	21000	20,000	19,000	19,000	NA	19,000	20,000
Magnesium-Dissolved	17,000	25000	NA	NA	NA	20,000	18,000	20,000
Manganese	33	45	64	46	48	NA	<20	33
Manganese-Dissolved	34	49	NA	NA	NA	40	<20	31
Mercury	0.10 J	<0.20	<0.2	<0.2	<0.2	NA	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	NA	NA	NA	<0.20 J	<0.20	<0.20
Molybdenum	<10	<10	<100	<100	<100	NA	<10	2.4 B
Molybdenum-Dissolved	<10	<10	NA	NA	NA	1.9 B	<10	1.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B		GM-27C					
Top of Screen Depth (ft bls)	145	145	210	210	210	210	210	210
Sample Date	08/05/05	12/7/2006	11/09/98	04/26/99	04/26/99	08/07/00	09/11/03	04/30/04
Sample ID	GWGM-27B (08/05/05)	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C	GM-27C	GWGM-27C (4/30/04)
Nickel	0.19 J	0.45 J	<50	<50	<50	NA	<25	1.1 B
Nickel-Dissolved	0.37 J	0.70 J	NA	NA	NA	<25	<25	1.7 B
Potassium	7,100	2,700	2,900	3,700	3,700	NA	NA	2,900
Potassium-Dissolved	6,900	3,100	NA	NA	NA	2,700	NA	2,800
Selenium	<5.0	<5.0	<5	<5	<5	NA	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	NA	NA	NA	<5.0	<5.0	<5.0
Silver	<0.20	<0.20	<0.5	<0.5	<0.5	NA	<0.20 W	<0.20
Silver-Dissolved	<0.20	<0.20	NA	NA	NA	<0.20	<0.20 W	<0.20
Sodium	4,000	3,400	5,400	5,600	5,800	NA	16,000	5,600
Sodium-Dissolved	3,900	3,700	NA	NA	NA	5,300	23,000	5,500
Thallium	<2.0	<2.0	<2	<2	<2	NA	<2.0	<2.0
Thallium-Dissolved	0.33 J	<2.0	NA	NA	NA	<2.0	<2.0	<2.0
Titanium	2.1 J	0.78 J	<50	<50	<50	NA	<50	0.76 B
Titanium-Dissolved	1.2 J	2.1 J	NA	NA	NA	<50	<50	<50
Vanadium	<20	<20	<20	<20	<20	NA	<20	<20
Vanadium-Dissolved	<20	<20	NA	NA	NA	<20	<20	<20
Zinc	<20	5.2 J	<20	<20	<20	NA	<20	0.83 B
Zinc-Dissolved	<20	7.3 J B	NA	NA	NA	<9.9 J	<20	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)		GM-28A				
Top of Screen Depth (ft bls)	210	210	40	40	40	40	40
Sample Date	08/05/05	09/11/03	10/28/98	04/19/99	02/29/00	07/19/00	04/28/04
Sample ID	GWGM-27C (08/05/05)	GM-27C-DL	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)
Aluminum	<200	NA	<200	<200	NA	NA	100 B
Aluminum-Dissolved	<200	NA	NA	NA	NA	<37	<200
Antimony	<50	NA	<50	<50	NA	NA	<50
Antimony-Dissolved	<50	NA	NA	NA	NA	<50	<50
Arsenic	26	NA	14	<5	NA	NA	19 B
Arsenic-Dissolved	26	NA	NA	NA	NA	19 B	17 B
Barium	20 J	NA	240	<200	NA	NA	250
Barium-Dissolved	19 J	NA	NA	NA	NA	250	240
Beryllium	<1.0	NA	<5	<5	NA	NA	<1.0
Beryllium-Dissolved	<1.0	NA	NA	NA	NA	<1.0	<1.0
Cadmium	<0.50	NA	<0.5	<0.5	NA	NA	<0.50
Cadmium-Dissolved	<0.50	NA	NA	NA	NA	<0.50	<0.50
Calcium	32,000	NA	100,000	88,000	NA	NA	86,000
Calcium-Dissolved	31,000	NA	NA	NA	91,000	89,000	83,000
Chromium	<5.0	NA	<50	<50	NA	NA	<5.0
Chromium-Dissolved	2.1 J	NA	NA	NA	NA	<5.0	<5.0
Cobalt	<10	NA	<50	<50	NA	NA	4.4 B
Cobalt-Dissolved	<10	NA	NA	NA	NA	3.7 B	4.4 B
Copper	<25	NA	<25	<25	NA	NA	<25
Copper-Dissolved	3.2 J	NA	NA	NA	NA	<25	<25
Iron	100	NA	6,600	6,600	NA	NA	9,200
Iron-Dissolved	140	NA	NA	NA	8,200 J	8,300	8,700
Lead	<3.0	NA	<3	<3	NA	NA	<3.0
Lead-Dissolved	<3.0	NA	NA	NA	NA	<3.0	<3.0
Magnesium	18,000	NA	45,000	40,000	NA	NA	37,000
Magnesium-Dissolved	18,000	NA	NA	NA	42,000	41,000	36,000
Manganese	26	NA	**2,100**	1,800	NA	NA	**2,100**
Manganese-Dissolved	24	NA	NA	NA	NA	**2,100**	**2,100**
Mercury	<0.20	NA	<0.2	<0.2	NA	NA	<0.20
Mercury-Dissolved	<0.20	NA	NA	NA	NA	<0.20	<0.20
Molybdenum	2.0 J	NA	<100	<100	NA	NA	4.1 B
Molybdenum-Dissolved	2.4 J	NA	NA	NA	NA	4.8 B	4.4 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)		GM-28A				
Top of Screen Depth (ft bls)	210	210	40	40	40	40	40
Sample Date	08/05/05	09/11/03	10/28/98	04/19/99	02/29/00	07/19/00	04/28/04
Sample ID	GWGM-27C (08/05/05)	GM-27C-DL	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)
Nickel	<25	NA	<50	<50	NA	NA	2.4 B
Nickel-Dissolved	0.19 J	NA	NA	NA	NA	1.6 B	2.3 B
Potassium	1,700	21,000	3,100	2,600	NA	NA	3,400
Potassium-Dissolved	1,600	27,000	NA	NA	3,100	3,200	3,200
Selenium	<5.0	NA	<5	<5	NA	NA	<5.0
Selenium-Dissolved	<5.0	NA	NA	NA	NA	<5.0	<5.0
Silver	<0.20	NA	<0.5	<0.5	NA	NA	<0.20
Silver-Dissolved	<0.20	NA	NA	NA	NA	<0.20	<0.20
Sodium	4,700	NA	3,300	2,900	NA	NA	4,000
Sodium-Dissolved	4,600	NA	NA	NA	3,200	3,100	3,900
Thallium	0.61 J	NA	<2	<2	NA	NA	<2.0
Thallium-Dissolved	0.44 J	NA	NA	NA	NA	<2.0	<2.0
Titanium	1.6 J	NA	<50	<50	NA	NA	4.8 B
Titanium-Dissolved	1.5 J	NA	NA	NA	NA	<50	<50
Vanadium	<20	NA	<20	<20	NA	NA	<20
Vanadium-Dissolved	<20	NA	NA	NA	NA	<20	<20
Zinc	<20	NA	24	<20	NA	NA	12 B
Zinc-Dissolved	<20	NA	NA	NA	NA	10 BJ	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A (continued)			GM-28B				
Top of Screen Depth (ft bls)	40	40	40	124.5	124.5	124.5	124.5	124.5
Sample Date	07/26/05	07/26/05	12/5/2006	11/08/98	11/08/98	04/19/99	04/19/99	03/01/00
Sample ID	GWGM28A (072605)	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B
Aluminum	42 J	<200	<200	<200	<200	<200	<200	NA
Aluminum-Dissolved	<200	<200	<200	NA	NA	NA	NA	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	NA
Antimony-Dissolved	<50	<50	<50	NA	NA	NA	NA	NA
Arsenic	24 B	21 B	19 J	<5	<5	<5	<5	NA
Arsenic-Dissolved	25 B	23 B	20	NA	NA	NA	NA	NA
Barium	230	240	250 B	<200	<200	<200	<200	NA
Barium-Dissolved	240	240	240 B	NA	NA	NA	NA	NA
Beryllium	<1.0	<1.0	<1.0	<5	<5	<5	<5	NA
Beryllium-Dissolved	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Cadmium	0.10 J	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	NA
Cadmium-Dissolved	0.11 J	<0.50	<0.50	NA	NA	NA	NA	NA
Calcium	89,000	90,000	91,000	32,000	31,000	22,000	21,000	NA
Calcium-Dissolved	90,000	89,000	92,000	NA	NA	NA	NA	18,000
Chromium	2.7 J B	2.9 J B	<5.0	<50	<50	<50	<50	NA
Chromium-Dissolved	2.1 J B	2.1 J B	<5.0	NA	NA	NA	NA	NA
Cobalt	4.9 J	5.1 J	4.5 J	<50	<50	<50	<50	NA
Cobalt-Dissolved	5.1 J	5.1 J	4.3 J	NA	NA	NA	NA	NA
Copper	1.4 J	0.48 J	0.59 J B	<25	<25	<25	<25	NA
Copper-Dissolved	0.92 J B	0.74 J B	<25	NA	NA	NA	NA	NA
Iron	12,000	11,000	9,600	<20	<20	<20	<20	NA
Iron-Dissolved	12,000	11,000	9,800	NA	NA	NA	NA	<24 J
Lead	<3.0	<3.0	<3.0	<3	<3	<3	<3	NA
Lead-Dissolved	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA
Magnesium	37,000	38,000	39,000	10,000	10,000	12,000	12,000	NA
Magnesium-Dissolved	38,000	37,000	38,000	NA	NA	NA	NA	13,000
Manganese	2,100	2,100	2,200	23	21	25	25	NA
Manganese-Dissolved	2,100	2,100	2,200	NA	NA	NA	NA	NA
Mercury	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	NA
Mercury-Dissolved	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA
Molybdenum	4.8 J	5.1 J	4.2 J	<100	<100	<100	<100	NA
Molybdenum-Dissolved	4.7 J	4.3 J	4.1 J	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A (continued)			GM-28B				
Top of Screen Depth (ft bls)	40	40	40	124.5	124.5	124.5	124.5	124.5
Sample Date	07/26/05	07/26/05	12/5/2006	11/08/98	11/08/98	04/19/99	04/19/99	03/01/00
Sample ID	GWGM28A (072605)	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B
Nickel	2.4 J B	2.4 J B	1.6 J	<50	<50	<50	<50	NA
Nickel-Dissolved	2.4 J	2.3 J	1.9 J	NA	NA	NA	NA	NA
Potassium	3,000	3,000	3,000	13,000	13,000	8,000	8,300	NA
Potassium-Dissolved	3,000	2,900	3,000	NA	NA	NA	NA	12,000
Selenium	<5.0	<5.0	<5.0	<5	<5	<5 J	<5 J	NA
Selenium-Dissolved	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA
Silver	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5	NA
Silver-Dissolved	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA
Sodium	4,400	4,500	5,000 B	12,000	11,000	11,000	11,000	NA
Sodium-Dissolved	4,400	4,500	5,000	NA	NA	NA	NA	13,000
Thallium	0.61 J	0.58 J	<2.0	<2	<2	<2	<2	NA
Thallium-Dissolved	0.51 J	<2.0	<2.0	NA	NA	NA	NA	NA
Titanium	3.9 J	2.7 J	2.7 J	<50	<50	<50	<50	NA
Titanium-Dissolved	3.1 J	2.8 J	2.3 J	NA	NA	NA	NA	NA
Vanadium	<20	<20	<20	<20	<20	<20	<20	NA
Vanadium-Dissolved	<20	<20	<20	NA	NA	NA	NA	NA
Zinc	3.6 J	<20	<20	<20	<20	<20	<20	NA
Zinc-Dissolved	4.6 J	<20	5.8 J B	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)				GM-29				
Top of Screen Depth (ft bls)	124.5	124.5	124.5	124.5	55	55	55	55	55
Sample Date	04/28/04	04/28/04	07/26/05	12/5/2006	10/09/98	10/09/98	04/16/99	02/29/00	09/10/03
Sample ID	iM-28B (4/2	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GMGM-29	GM-29
Aluminum	<200	<200	<200	14 J B	<200	<200	<200	NA	<200
Aluminum-Dissolved	<200	<200	<200	13 J B	NA	NA	NA	NA	<200
Antimony	<50	<50	<50	<50	<50	<50	<50	NA	<50
Antimony-Dissolved	<50	<50	<50	<50	NA	NA	NA	NA	<50
Arsenic	4.7 B	4.6 B	6.1 J B	5.8 J	11	10	13 J	NA	<20
Arsenic-Dissolved	5.3 B	5.3 B	6.2 J B	6.5 J	NA	NA	NA	NA	<20
Barium	94 B	96 B	79 J	91 J B	<200	<200	<200	NA	<100
Barium-Dissolved	88 B	87 B	79 J	98 J B	NA	NA	NA	NA	<100
Beryllium	<1.0	<1.0	<1.0	<1.0	<5	<5	<5	NA	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	NA	NA	NA	NA	<1.0
Cadmium	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	NA	<0.50
Cadmium-Dissolved	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA	<0.50
Calcium	29,000	30,000	29,000	28,000	70,000	72,000	57,000	NA	45,000
Calcium-Dissolved	27,000	26,000	28,000	32,000	NA	NA	NA	46,000	47,000
Chromium	<5.0	<5.0	2.1 J B	<5.0	<50	<50	<50	NA	<5.0
Chromium-Dissolved	<5.0	<5.0	1.9 J B	<5.0	NA	NA	NA	NA	<5.0
Cobalt	<10	<10	0.12 J	0.077 J	<50	<50	<50	NA	<10
Cobalt-Dissolved	<10	<10	0.10 J	0.12 J	NA	NA	NA	NA	<10
Copper	<25	<25	0.50 J	0.74 J B	<25	<25	<25	NA	<25
Copper-Dissolved	<25	<25	0.61 J B	<25	NA	NA	NA	NA	<25
Iron	18 B	17 B	<100	<100	6,200	6,300	4,700	NA	2,000
Iron-Dissolved	12 B	14 B	<100	<100	NA	NA	NA	2,700 J	2100
Lead	<3.0	<3.0	<3.0	<3.0	<3	<3	<3	NA	<3.0
Lead-Dissolved	<3.0	<3.0	<3.0	<3.0	NA	NA	NA	NA	<3.0
Magnesium	18,000	19,000	19,000	17,000	59,000	59,000	46,000	NA	35,000
Magnesium-Dissolved	18,000	17,000	18,000	19,000	NA	NA	NA	37,000	37,000
Manganese	35	36	28	32	130	130	83	NA	58
Manganese-Dissolved	31	31	27	35	NA	NA	NA	NA	61
Mercury	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	NA	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	<0.20
Molybdenum	<10	<10	<10	<10	<100	<100	<100	NA	<10
Molybdenum-Dissolved	1.8 B	1.6 B	<10	<10	NA	NA	NA	NA	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)				GM-29				
Top of Screen Depth (ft bls)	124.5	124.5	124.5	124.5	55	55	55	55	55
Sample Date	04/28/04	04/28/04	07/26/05	12/5/2006	10/09/98	10/09/98	04/16/99	02/29/00	09/10/03
Sample ID	iM-28B (4/2	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GMGM-29	GM-29
Nickel	2.6 B	<25	0.67 J B	0.25 J	<50	<50	<50	NA	<25
Nickel-Dissolved	2.6 B	2.3 B	0.63 J	0.73 J	NA	NA	NA	NA	<25
Potassium	2,200	2,300	2,200	1800	2,700	2,700	2,600	NA	2,400
Potassium-Dissolved	4,700	4,500	2,200	1900	NA	NA	NA	2,400	2,500
Selenium	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	NA	<5.0
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0	NA	NA	NA	NA	<5.0
Silver	<0.20	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	NA	<0.20 W
Silver-Dissolved	<0.20	<0.20	<0.20	<0.20	NA	NA	NA	NA	<0.20 W
Sodium	2,800	2,900	3,600	2,500 B	7,000	7,300	6,000	NA	4,400
Sodium-Dissolved	5,900	5,600	3,600	2,900	NA	NA	NA	5,000	4,700
Thallium	<2.0	<2.0	<2.0	<2.0	<2	<2	<2	NA	<2.0
Thallium-Dissolved	<2.0	<2.0	<2.0	<2.0	NA	NA	NA	NA	<2.0
Titanium	<50	<50	1.9 J	1.8 J	<50	<50	<50	NA	<50
Titanium-Dissolved	<50	<50	2.0 J	1.8 J	NA	NA	NA	NA	<50
Vanadium	0.43 B	0.36 B	<20	<20	<20	<20	<20	NA	<20
Vanadium-Dissolved	0.39 B	<20	<20	<20	NA	NA	NA	NA	<20
Zinc	<20	<20	5.2 J	11 J B	<20	<20	<20	NA	<20
Zinc-Dissolved	<20	<20	<20	18 J B	NA	NA	NA	NA	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29 (continued)			GM-30			GM-31		
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105	105	105
Sample Date	05/03/04	07/28/05	12/8/2006	10/27/98	05/12/99	05/12/99	10/24/98	05/03/99	10/09/00
Sample ID	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31	GWGM-31	GWGM-31
Aluminum	16 B	52 J	<200	<200	<200	<200	<200	<200	NA
Aluminum-Dissolved	<200	16 J	15 J	NA	NA	NA	NA	NA	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	<50	NA
Antimony-Dissolved	<50	57	<50	NA	NA	NA	NA	NA	NA
Arsenic	12 B	15 J	12 J	15	<5	<5	13	<5	NA
Arsenic-Dissolved	11 B	12 J	15 J	NA	NA	NA	NA	NA	NA
Barium	87 B	81 J	91 J	280	<200	<200	<200 J	<200	NA
Barium-Dissolved	86 B	79 J	110 B	NA	NA	NA	NA	NA	NA
Beryllium	<1.0	<1.0	<1.0	<5	<5	<5	<5	<5	NA
Beryllium-Dissolved	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA
Cadmium	<0.50	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5	<0.5	NA
Cadmium-Dissolved	<0.50	0.14 J	<0.50	NA	NA	NA	NA	NA	NA
Calcium	42,000	41,000	43,000	110,000	140,000	130,000	62,000	63,000 J	NA
Calcium-Dissolved	42,000	40,000	52,000	NA	NA	NA	NA	NA	64,000
Chromium	<5.0	<5.0	<5.0	<50	<50	<50	<50 J	<50	NA
Chromium-Dissolved	<5.0	**13**	<5.0	NA	NA	NA	NA	NA	NA
Cobalt	<10	0.14 J	<10	<50	<50	<50	<50 J	<50	NA
Cobalt-Dissolved	<10	0.32 J	0.12 J	NA	NA	NA	NA	NA	NA
Copper	<25	<25	4.8 J	<25	<25	<25	<25 J	<25	NA
Copper-Dissolved	<25	1.2 J	0.67 J	NA	NA	NA	NA	NA	NA
Iron	580	930	2,400	9,300	2,600	2,400	5,900 J	4,100	NA
Iron-Dissolved	470	870	2,900	NA	NA	NA	NA	NA	4,800
Lead	<3.0	<3.0	<3.0	<3	<3	<3	<3	<3	NA
Lead-Dissolved	<3.0	0.72 J	<3.0	NA	NA	NA	NA	NA	NA
Magnesium	30,000	29,000	35,000	48,000	59,000	57,000	28000 J	29,000	NA
Magnesium-Dissolved	30,000	30,000	43,000	NA	NA	NA	NA	NA	29,000
Manganese	49	41	50	730	1,400	1,300	1,000	940 J	NA
Manganese-Dissolved	49	48	61	NA	NA	NA	NA	NA	NA
Mercury	<0.20	<0.20	<0.20	<0.2	<0.2	<0.2	<0.2	<0.2	NA
Mercury-Dissolved	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA	NA
Molybdenum	2.0 B	<10	<10	<100	<100	<100	<100 J	<100	NA
Molybdenum-Dissolved	2.4 B	1.7 J	1.9 J	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29 (continued)			GM-30			GM-31		
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105	105	105
Sample Date	05/03/04	07/28/05	12/8/2006	10/27/98	05/12/99	05/12/99	10/24/98	05/03/99	10/09/00
Sample ID	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31	GWGM-31	GWGM-31
Nickel	<25	0.15 J	<25	<50	<50	<50	<50 J	<50	NA
Nickel-Dissolved	<25	9.3 J	0.29 J	NA	NA	NA	NA	NA	NA
Potassium	2,500	1,900	2,000	6,600	12,000	12,000	2,300	3,100	NA
Potassium-Dissolved	2,500	2,100	2,700	NA	NA	NA	NA	NA	2,500
Selenium	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	NA
Selenium-Dissolved	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA	NA
Silver	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5	<0.5	NA
Silver-Dissolved	<0.20	**0.29**	<0.20	NA	NA	NA	NA	NA	NA
Sodium	3,900	3,700	4,800	28,000	41,000	40,000	7,900	9,800	NA
Sodium-Dissolved	4,000	4,600	6,000	NA	NA	NA	NA	NA	10,000 J
Thallium	<2.0	<2.0	<2.0	<2	<2	<2	<2	<2	NA
Thallium-Dissolved	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA	NA
Titanium	1.8 B	2.9 J	1.1 J	<50	<50	<50	<50 J	<50	NA
Titanium-Dissolved	<50	2.5 J	3.1 J	NA	NA	NA	NA	NA	NA
Vanadium	<20	<20	<20	<20	<20	<20	<20 J	<20	NA
Vanadium-Dissolved	<20	<20	<20	NA	NA	NA	NA	NA	NA
Zinc	1.5 B	<20	6.8 J	<20	<20	<20	<20 J	<20	NA
Zinc-Dissolved	<20	15 J	44 B	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-32						GM-33	GM-34A	
Top of Screen Depth (ft bls)	135	135	135	135	135	135	74	30	30
Sample Date	10/25/98	04/27/99	09/25/03	05/26/04	05/26/04	09/25/03	05/10/99	10/08/98	04/17/99
Sample ID	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-32(5/26/04)-DL	GM-32-DL	GWGM-33	GWGM-34A	GWGM-34A
Aluminum	<200	<200	1000	420	NA	NA	<200	<200	<200
Aluminum-Dissolved	NA	NA	<200	26 B	NA	NA	NA	NA	NA
Antimony	<50	<50	<50	<50	NA	NA	<50	<50	<50
Antimony-Dissolved	NA	NA	<50	<50	NA	NA	NA	NA	NA
Arsenic	**170**	62	150	150	NA	NA	<5 J	<5	<5
Arsenic-Dissolved	NA	NA	140	120	NA	NA	NA	NA	NA
Barium	220 J	200	350	**590**	NA	NA	<200	<200	<200
Barium-Dissolved	NA	NA	330	**430**	NA	NA	NA	NA	NA
Beryllium	<5	<5	<1.0	0.23 B	NA	NA	<5	<5	<5
Beryllium-Dissolved	NA	NA	<1.0	0.22 B	NA	NA	NA	NA	NA
Cadmium	<0.5	<1 M	<0.50	<0.50	NA	NA	<0.5	<0.5	<0.5
Cadmium-Dissolved	NA	NA	<0.50	<0.50	NA	NA	NA	NA	NA
Calcium	1,500,000	1,600,000	NA	NA	1,000,000	1,200,000	58,000	40,000	53,000
Calcium-Dissolved	NA	NA	NA	NA	1,100,000	1,200,000	NA	NA	NA
Chromium	<50 J	<50	***57***	***86***	NA	NA	<50	<50	<50
Chromium-Dissolved	NA	NA	***43***	**32**	NA	NA	NA	NA	NA
Cobalt	<50 J	<50	<10	<10	NA	NA	<50	<50	<50
Cobalt-Dissolved	NA	NA	<10	<10	NA	NA	NA	NA	NA
Copper	***100 J***	<25	<25	**15 B**	NA	NA	<25	<25	<25
Copper-Dissolved	NA	NA	<25	<25	NA	NA	NA	NA	NA
Iron	220,000 J	230,000	190,000	140,000	NA	NA	410	<20	<20
Iron-Dissolved	NA	NA	180,000	140,000	NA	NA	NA	NA	NA
Lead	<3	<10 M	<3.0	<3.0	NA	NA	<3	<3	<3
Lead-Dissolved	NA	NA	<3.0	<3.0	NA	NA	NA	NA	NA
Magnesium	500,000 J	560,000	440,000	370,000	NA	NA	26,000	17,000	23,000
Magnesium-Dissolved	NA	NA	440,000	390,000	NA	NA	NA	NA	NA
Manganese	1,000	1,100	950	730	NA	NA	150	<5	<5
Manganese-Dissolved	NA	NA	910	810	NA	NA	NA	NA	NA
Mercury	<0.2	<0.2	<0.20	<0.20	NA	NA	<0.2	<0.2	<0.2
Mercury-Dissolved	NA	NA	<0.20	<0.20	NA	NA	NA	NA	NA
Molybdenum	<100 J	<100	<10	0.92 B	NA	NA	<100	<100	<100
Molybdenum-Dissolved	NA	NA	<10	<10	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-32						GM-33	GM-34A	
Top of Screen Depth (ft bls)	135	135	135	135	135	135	74	30	30
Sample Date	10/25/98	04/27/99	09/25/03	05/26/04	05/26/04	09/25/03	05/10/99	10/08/98	04/17/99
Sample ID	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-32(5/26/04)-DL	GM-32-DL	GWGM-33	GWGM-34A	GWGM-34A
Nickel	<50 J	<50	<25	41	NA	NA	<50	<50	<50
Nickel-Dissolved	NA	NA	<25	4.3 B	NA	NA	NA	NA	NA
Potassium	9,500	10,000	16,000	13,000	NA	NA	2,300	1,300	1100
Potassium-Dissolved	NA	NA	16,000	14,000	NA	NA	NA	NA	NA
Selenium	<5	<5	<5.0	**6.4**	NA	NA	<5	<5	<5
Selenium-Dissolved	NA	NA	<5.0	5.0 B	NA	NA	NA	NA	NA
Silver	<0.5	<2.5 M	<0.20	<0.20	NA	NA	<0.5	<0.5	<0.5
Silver-Dissolved	NA	NA	<0.20	<0.20	NA	NA	NA	NA	NA
Sodium	63,000	69,000	NA	NA	51,000	70,000	3,400	34,000	11,000
Sodium-Dissolved	NA	NA	NA	NA	55,000	69,000	NA	NA	NA
Thallium	<2	<5 M	<2.0	1.2 B	NA	NA	<2	<2	<2
Thallium-Dissolved	NA	NA	<2.0	0.80 B	NA	NA	NA	NA	NA
Titanium	1900 J	1600	1300	760	NA	NA	<50	<50	<50
Titanium-Dissolved	NA	NA	1200	450	NA	NA	NA	NA	NA
Vanadium	**200 J**	**160**	**130**	**87**	NA	NA	<20	<20	<20
Vanadium-Dissolved	NA	NA	**130**	**47**	NA	NA	NA	NA	NA
Zinc	48 J	22	43	39	NA	NA	<20	<20	<20
Zinc-Dissolved	NA	NA	20	13 B	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A (continued)		GM-34B					
Top of Screen Depth (ft bls)	30	30	85	85	85	85	85	85
Sample Date	04/29/04	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04	04/28/04	09/24/03
Sample ID	GWGM-34A (4/29/04)	GWGM-34A (4/29/04)-DL	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-34B (4/28/04)-DL	GM-34B-DL
Aluminum	31 B	NA	<200	<200	<200	66 B	NA	NA
Aluminum-Dissolved	<200	NA	NA	NA	<200	<200	NA	NA
Antimony	<50	NA	<50	<50	<50	<50	NA	NA
Antimony-Dissolved	<50	NA	NA	NA	<50	<50	NA	NA
Arsenic	<20	NA	<5	<5 J	<20	<20	NA	NA
Arsenic-Dissolved	<20	NA	NA	NA	<20	<20	NA	NA
Barium	25 B	NA	<200	<200	<100	86 B	NA	NA
Barium-Dissolved	24 B	NA	NA	NA	<100	84 B	NA	NA
Beryllium	<1.0	NA	<5	<5	<1.0	<1.0	NA	NA
Beryllium-Dissolved	<1.0	NA	NA	NA	<1.0	<1.0	NA	NA
Cadmium	<0.50	NA	<0.5	<0.5	<0.50	<0.50	NA	NA
Cadmium-Dissolved	<0.50	NA	NA	NA	<0.50	<0.50	NA	NA
Calcium	41,000	NA	37,000	45,000	67,000	61,000	NA	NA
Calcium-Dissolved	40,000	NA	NA	NA	63,000	60,000	NA	NA
Chromium	1.7 B	NA	<50	<50	<5.0	1.4 B	NA	NA
Chromium-Dissolved	1.5 B	NA	NA	NA	<5.0	<5.0	NA	NA
Cobalt	<10	NA	<50	<50	<10	<10	NA	NA
Cobalt-Dissolved	<10	NA	NA	NA	<10	<10	NA	NA
Copper	<25	NA	<25	<25	<25	3.3 B	NA	NA
Copper-Dissolved	<25	NA	NA	NA	<25	2.2 B	NA	NA
Iron	59 B	NA	<20	<20	390	100	NA	NA
Iron-Dissolved	<100	NA	NA	NA	<100	<100	NA	NA
Lead	<3.0	NA	<3	<3	<3.0	1.8 B	NA	NA
Lead-Dissolved	<3.0	NA	NA	NA	<3.0	1.6 B	NA	NA
Magnesium	17,000	NA	16,000	21,000	31,000	28,000	NA	NA
Magnesium-Dissolved	16,000	NA	NA	NA	30,000	28,000	NA	NA
Manganese	3.2 B	NA	150	200	170	110	NA	NA
Manganese-Dissolved	<20	NA	NA	NA	62	45	NA	NA
Mercury	<0.20	NA	<0.2	<0.2	<0.20	<0.20	NA	NA
Mercury-Dissolved	<0.20	NA	NA	NA	<0.20	<0.20	NA	NA
Molybdenum	1.1 B	NA	<100	<100	<10	1.1 B	NA	NA
Molybdenum-Dissolved	<10	NA	NA	NA	<10	2.2 B	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A (continued)		GM-34B					
Top of Screen Depth (ft bls)	30	30	85	85	85	85	85	85
Sample Date	04/29/04	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04	04/28/04	09/24/03
Sample ID	GWGM-34A (4/29/04)	GWGM-34A (4/29/04)-DL	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-34B (4/28/04)-DL	GM-34B-DL
Nickel	<25	NA	<50	<50	<25	1.4 B	NA	NA
Nickel-Dissolved	<25	NA	NA	NA	<25	1.4 B	NA	NA
Potassium	1,800	NA	8,700	3,300	3,500	3,400	NA	NA
Potassium-Dissolved	1,800	NA	NA	NA	3,400	3,400	NA	NA
Selenium	<5.0	NA	<5	<5	<5.0	<5.0	NA	NA
Selenium-Dissolved	<5.0	NA	NA	NA	<5.0	<5.0	NA	NA
Silver	<0.20	NA	<0.5	<0.5	<0.20	<0.20	NA	NA
Silver-Dissolved	**0.065 B**	NA	NA	NA	<0.20	<0.20	NA	NA
Sodium	NA	62,000	26,000	17,000	NA	NA	45,000	39,000
Sodium-Dissolved	NA	63,000	NA	NA	NA	NA	44,000	37,000
Thallium	<2.0	NA	<2	<2	<2.0	<2.0	NA	NA
Thallium-Dissolved	<2.0	NA	NA	NA	<2.0	<2.0	NA	NA
Titanium	1.6 B	NA	<50	<50	<50	3.1 B	NA	NA
Titanium-Dissolved	<50	NA	NA	NA	<50	<50	NA	NA
Vanadium	1.3 B	NA	<20	<20	<20	1.1 B	NA	NA
Vanadium-Dissolved	0.99 B	NA	NA	NA	<20	0.83 B	NA	NA
Zinc	2.2 B	NA	<20	<20	<20	5.3 B	NA	NA
Zinc-Dissolved	1.6 B	NA	NA	NA	<20	5.5 B	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-35			GM-36				GM-37A
Top of Screen Depth (ft bls)	40	40	40	95	95	95	95	144
Sample Date	11/04/98	05/04/99	05/04/99	11/03/98	05/05/99	05/04/04	05/04/04	11/18/98
Sample ID	GWGM-35	GWGM-35	GWGM-84	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-36 (5/4/04)-DL	GWGM-37A
Aluminum	<200	<200	<200	<200	<200	590	NA	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	30 B	NA	NA
Antimony	<50	<50	<50	<50	<50	<50	NA	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	<50	NA	NA
Arsenic	<5	<5	<5	<5	<5	<20	NA	54
Arsenic-Dissolved	NA	NA	NA	NA	NA	<20	NA	NA
Barium	<200	<200 J	<200 J	<200	<200 J	49 B	NA	**840**
Barium-Dissolved	NA	NA	NA	NA	NA	43 B	NA	NA
Beryllium	<5	<5	<5	<5	<5	<1.0	NA	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	<1.0	NA	NA
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	NA	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	<0.50	NA	NA
Calcium	180,000	130,000 J	130,000 J	77,000	64,000 J	81,000	NA	350,000
Calcium-Dissolved	NA	NA	NA	NA	NA	78,000	NA	NA
Chromium	<50	<50 J	<50 J	<50	<50 J	**13**	NA	***120***
Chromium-Dissolved	NA	NA	NA	NA	NA	<5.0	NA	NA
Cobalt	<50	<50 J	<50 J	<50	<50 J	1.2 B	NA	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	<10	NA	NA
Copper	<25	<25 J	<25 J	<25	<25 J	***83***	NA	***41***
Copper-Dissolved	NA	NA	NA	NA	NA	***52***	NA	NA
Iron	14,000	5,600	5,500	<20	<20	960	NA	75,000 J
Iron-Dissolved	NA	NA	NA	NA	NA	12 B	NA	NA
Lead	<3	<3	<3	<3	<3	<3.0	NA	<3
Lead-Dissolved	NA	NA	NA	NA	NA	<3.0	NA	NA
Magnesium	61,000	43,000	42,000	38,000	32,000	41,000	NA	150,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	40,000	NA	NA
Manganese	1,400	800 J	790 J	18	33 J	190	NA	1,800
Manganese-Dissolved	NA	NA	NA	NA	NA	7.4 B	NA	NA
Mercury	<0.2 J	<0.2	<0.2	***14***	<0.2	<0.20	NA	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	<0.20	NA	NA
Molybdenum	<100	<100	<100	<100	<100	<10	NA	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	<10	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-35			GM-36				GM-37A
Top of Screen Depth (ft bls)	40	40	40	95	95	95	95	144
Sample Date	11/04/98	05/04/99	05/04/99	11/03/98	05/05/99	05/04/04	05/04/04	11/18/98
Sample ID	GWGM-35	GWGM-35	GWGM-84	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-36 (5/4/04)-DL	GWGM-37A
Nickel	<50	<50 J	<50 J	<50	<50 J	9.0 B	NA	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	3.4 B	NA	NA
Potassium	3,300	3,200	3,100	2,000	1,800	2,700	NA	7,900
Potassium-Dissolved	NA	NA	NA	NA	NA	2,600	NA	NA
Selenium	<5	<5	<5	<5	<5	<5.0	NA	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	<5.0	NA	NA
Silver	<0.5	<0.5	<0.5	<0.5	<0.5	<0.20	NA	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	<0.20	NA	NA
Sodium	12,000	10,000 J	11,000 J	23,000	21,000 J	NA	43,000	25,000
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	42,000	NA
Thallium	<2	<2	<2	<2	<2	<2.0	NA	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	<2.0	NA	NA
Titanium	<50	<50	<50	<50	<50	26 B	NA	260
Titanium-Dissolved	NA	NA	NA	NA	NA	<50	NA	NA
Vanadium	<20	<20	<20	<20	<20	2.1 B	NA	110
Vanadium-Dissolved	NA	NA	NA	NA	NA	0.58 B	NA	NA
Zinc	<20	<20 J	<20 J	<20	<20 J	7.2 B	NA	55
Zinc-Dissolved	NA	NA	NA	NA	NA	4.0 B	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37A (continued)			GM-37B			
Top of Screen Depth (ft bls)	144	144	144	328	328	328	328
Sample Date	05/11/99	09/25/03	05/17/04	10/13/98	05/14/99	09/25/03	05/27/04
Sample ID	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B	GWGM-37B	GM-37B	GWGM-37B (5/27/04)
Aluminum	<200	3,100	5,100	<200	<200	<200	15 B
Aluminum-Dissolved	NA	<200	13 B	NA	NA	<200	14 B
Antimony	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	<50	<50	NA	NA	<50	<50
Arsenic	74	55	63	81	76	61	54
Arsenic-Dissolved	NA	53	57	NA	NA	58	57
Barium	**820**	**580**	**620**	**890**	**960**	**820**	**770**
Barium-Dissolved	NA	**540**	**590**	NA	NA	**800**	**790**
Beryllium	<5	<1.0	0.24 B	<5	<5	<1.0	<1.0
Beryllium-Dissolved	NA	<1.0	<1.0	NA	NA	<1.0	<1.0
Cadmium	<0.5	<0.50	<0.50	<0.5	<0.5	<0.50	<0.50
Cadmium-Dissolved	NA	<0.50	<0.50	NA	NA	<0.50	<0.50
Calcium	370,000	270,000	270,000	850,000	780,000	NA	NA
Calcium-Dissolved	NA	270,000	260,000	NA	NA	NA	NA
Chromium	<50	***36***	**29**	<50	<50	**18**	**14**
Chromium-Dissolved	NA	**18**	**14**	NA	NA	**16**	**15**
Cobalt	<50	<10	6.3 B	<50	<50	<10	<10
Cobalt-Dissolved	NA	<10	1.5 B	NA	NA	<10	<10
Copper	<25	<25	**22 B**	***52***	<25	***52***	1.4 B
Copper-Dissolved	NA	<25	<25	NA	NA	<25	<25
Iron	79,000	63,000	66,000	95,000	100,000	64,000	62,000
Iron-Dissolved	NA	56,000	53,000	NA	NA	63,000	65,000
Lead	<3	<3.0	1.6 B	<3	<3	<3.0	<3.0
Lead-Dissolved	NA	<3.0	<3.0	NA	NA	<3.0	<3.0
Magnesium	160,000	110,000	120,000	410,000	450,000	340,000	320,000
Magnesium-Dissolved	NA	110000	110000	NA	NA	330000	330000
Manganese	1,100	790	770	770	840	470	480
Manganese-Dissolved	NA	680	490	NA	NA	470	480
Mercury	<0.2	<0.20	<0.20	<0.2	<0.2	<0.20	<0.20
Mercury-Dissolved	NA	<0.20	<0.20	NA	NA	<0.20	<0.20
Molybdenum	<100	<10	6.3 B	<100	<100	<10	<10
Molybdenum-Dissolved	NA	<10	2.0 B	NA	NA	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37A (continued)			GM-37B			
Top of Screen Depth (ft bls)	144	144	144	328	328	328	328
Sample Date	05/11/99	09/25/03	05/17/04	10/13/98	05/14/99	09/25/03	05/27/04
Sample ID	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B	GWGM-37B	GM-37B	GWGM-37B (5/27/04)
Nickel	<50	<25	15 B	<50	<50	<25	1.7 B
Nickel-Dissolved	NA	<25	2.5 B	NA	NA	<25	1.6 B
Potassium	9,100	15,000	9,400	8,300	19,000	11,000	11,000
Potassium-Dissolved	NA	14,000	7,000	NA	NA	11,000	12,000
Selenium	<5	<5.0	<5.0	<5	<5	<5.0	3.5 B
Selenium-Dissolved	NA	<5.0	<5.0	NA	NA	<5.0	3.7 B
Silver	<0.5	<0.20	**0.18 B**	**0.58**	<0.5	<0.20	<0.20
Silver-Dissolved	NA	<0.20	<0.20	NA	NA	<0.20	<0.20
Sodium	24,000	25,000	20,000	45,000	51,000	NA	NA
Sodium-Dissolved	NA	24,000	19,000	NA	NA	NA	NA
Thallium	<2	<2.0	<2.0	<2	<2	<2.0	0.60 B
Thallium-Dissolved	NA	<2.0	<2.0	NA	NA	<2.0	0.50 B
Titanium	250	190	270	980	1100	630	590
Titanium-Dissolved	NA	53	55	NA	NA	600	620
Vanadium	98	45	51	79	79	42	41
Vanadium-Dissolved	NA	32	27	NA	NA	40	42
Zinc	<20	25	38	<20	<20	94	10 B
Zinc-Dissolved	NA	<20	10 B	NA	NA	<20	7.2 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)		GM-38A			GM-38B		GM-38C	
Top of Screen Depth (ft bls)	328	328	95	95	95	160	160	200	200
Sample Date	05/27/04	09/25/03	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98	10/20/98
Sample ID	GWGM-37B(5/27/04)-DL	GM-37B-DL	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C	GWGM-97
Aluminum	NA	NA	<200	<200	<200	<200	<200	<200	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	NA	NA	<5	<5	<5 J	<5	<5	<5	<5
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	NA	NA	<200	<200	<200	<200	<200	<200	<200
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	<5	<5	<5	<5	<5	<5	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	600,000	570,000	47,000	48,000	48,000	44,000	38,000	36,000	36,000
Calcium-Dissolved	600,000	560,000	NA	NA	NA	NA	NA	NA	NA
Chromium	NA	NA	<50	<50	<50	<50	<50	<50	<50
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	<50	<50	<50	<50	<50	<50	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	<25	<25	<25	<25	<25	<25	<25
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	<20	<20	<20	35	<20	27	29
Iron-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	NA	NA	<3	<3	<3	<3	<3	<3	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	20,000	20,000	20,000	24,000	22,000	17,000	17,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	NA	NA	9.2	11	6	140	98	150	150
Manganese-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	NA	NA	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2 J	<0.2 J
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	NA	NA	<100	<100	<100	<100	<100	<100	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)		GM-38A			GM-38B		GM-38C	
Top of Screen Depth (ft bls)	328	328	95	95	95	160	160	200	200
Sample Date	05/27/04	09/25/03	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98	10/20/98
Sample ID	GWGM-37B(5/27/04)-DL	GM-37B-DL	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C	GWGM-97
Nickel	NA	NA	<50	<50	<50	<50	<50	<50	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	1,500	1,500	1,300	2,300	7,100	2,100	2,100
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	NA	NA	<5	<5	<5	<5	<5	<5	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	43,000	46,000	12,000	12,000	10,000	3,000	5,200	8,900	9,100
Sodium-Dissolved	44,000	45,000	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	<2	<2	<2	<2	<2	<2	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	NA	NA	<50	<50	<50	<50	<50	<50	<50
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	<20	<20	<20	<20	<20	<20	<20
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	<20	<20	<20	<20	<20	<20	<20
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C (continued)	GM-39			GM-40A			GM-40B
Top of Screen Depth (ft bls)	200	85	85	85	75	75	75	120
Sample Date	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04	10/26/98
Sample ID	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)	GWGM-40B
Aluminum	<200	<200	<200	<200	<200	<200	76 B	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	<200	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	<50	NA
Arsenic	<5	6.1	6.8 J	6.9 J	<5	<5	8.4 B	110
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	6.9 B	NA
Barium	<200	<200	<200	<200	<200 J	<200	21 B	**580**
Barium-Dissolved	NA	NA	NA	NA	NA	NA	22 B	NA
Beryllium	<5	<5	<5	<5	<5	<5	<1.0	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	<1.0	NA
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.50	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	<0.50	NA
Calcium	30,000 J	47,000	47,000	45,000	19,000	20,000	23,000	1,400,000
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	23,000	NA
Chromium	<50	<50	<50	<50	<50 J	<50	2.9 B	<50
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	<5.0	NA
Cobalt	<50	<50	<50	<50	<50 J	<50	<10	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	<10	NA
Copper	<25	<25	<25	<25	<25 J	<25	8.0 B	***50***
Copper-Dissolved	NA	NA	NA	NA	NA	NA	<25	NA
Iron	<20	59	210	160	<20 J	<20	180	92,000
Iron-Dissolved	NA	NA	NA	NA	NA	NA	23 B	NA
Lead	<3	<3	<3	<3	<3	<3	<3.0	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	<3.0	NA
Magnesium	15,000	23,000	25,000	25,000	5,900 J	6,000	7,200	360,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	7100	NA
Manganese	140 J	530	850	840	18	18	28	680
Manganese-Dissolved	NA	NA	NA	NA	NA	NA	21	NA
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	<0.20	NA
Molybdenum	<100	<100	<100	<100	<100 J	<100	1.9 B	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	1.8 B	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C (continued)	GM-39			GM-40A			GM-40B
Top of Screen Depth (ft bls)	200	85	85	85	75	75	75	120
Sample Date	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04	10/26/98
Sample ID	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)	GWGM-40B
Nickel	<50	<50	<50	<50	<50 J	<50	1.7 B	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	2.0 B	NA
Potassium	1,800	1,600	2,200	2,000	1,200	1,300	1,500	12,000
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	1500	NA
Selenium	<5	<5	<5	<5	<5	<5	<5.0	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	<5.0	NA
Silver	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.20	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	<0.20	NA
Sodium	5,100	20,000	14,000	14,000	5,200	4,800	5,100	95,000
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	5,400	NA
Thallium	<2	<2	<2	<2	<2	<2	<2.0	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	<2.0	NA
Titanium	<50	<50	<50	<50	<50 J	<50	4.9 B	960
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	<50	NA
Vanadium	<20	<20	<20	<20	<20 J	<20	0.40 B	87
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	<20	NA
Zinc	<20	<20	<20	<20	<20 J	<20	5.1 B	36
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	<20	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B (continued)			GM-41		GM-42		GM-49
Top of Screen Depth (ft bls)	120	120	120	40	40	72	72	83.5
Sample Date	04/27/99	05/19/04	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99
Sample ID	GWGM-40B	GWGM-40B (5/19/04)	GWGM-40B (5/19/04)-DL	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49
Aluminum	<200	22 B	NA	<200	<200	<200	<200	<200
Aluminum-Dissolved	NA	23 B	NA	NA	NA	NA	NA	NA
Antimony	<50	<50	NA	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	<50	NA	NA	NA	NA	NA	NA
Arsenic	150	97	NA	9.5	15 J	<5	7	<5
Arsenic-Dissolved	NA	95	NA	NA	NA	NA	NA	NA
Barium	**480**	**1,000**	NA	<200	<200	<200	<200	<200
Barium-Dissolved	NA	**1,000**	NA	NA	NA	NA	NA	NA
Beryllium	<5	<1.0	NA	<5	<5	<5	<5	<5
Beryllium-Dissolved	NA	<1.0	NA	NA	NA	NA	NA	NA
Cadmium	<1 M	<0.50	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium-Dissolved	NA	<0.50	NA	NA	NA	NA	NA	NA
Calcium	960,000	NA	900,000	130,000	110,000	130,000	120,000	91,000
Calcium-Dissolved	NA	NA	890,000	NA	NA	NA	NA	NA
Chromium	<50	**14**	NA	<50	<50	<50	<50	<50
Chromium-Dissolved	NA	**13**	NA	NA	NA	NA	NA	NA
Cobalt	<50	<10	NA	<50	<50	<50	<50	<50
Cobalt-Dissolved	NA	<10	NA	NA	NA	NA	NA	NA
Copper	<25	<25	NA	<25	<25	<25	<25	<25
Copper-Dissolved	NA	<25	NA	NA	NA	NA	NA	NA
Iron	57,000	37,000	NA	12,000	14,000	3,900	2,800	490
Iron-Dissolved	NA	38,000	NA	NA	NA	NA	NA	NA
Lead	<10 M	<3.0	NA	<3	<3	<3	<3	<3
Lead-Dissolved	NA	<3.0	NA	NA	NA	NA	NA	NA
Magnesium	270,000	270,000	NA	41,000	38,000	71,000	65,000	55,000
Magnesium-Dissolved	NA	270000	NA	NA	NA	NA	NA	NA
Manganese	470	270	NA	710	360	660	310	63
Manganese-Dissolved	NA	270	NA	NA	NA	NA	NA	NA
Mercury	<0.2	<0.20	NA	<0.2 J	<0.2	<0.2 J	<0.2	<0.2
Mercury-Dissolved	NA	<0.20	NA	NA	NA	NA	NA	NA
Molybdenum	<100	<10	NA	<100	<100	<100	<100	<100
Molybdenum-Dissolved	NA	<10	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B (continued)			GM-41		GM-42		GM-49
Top of Screen Depth (ft bls)	120	120	120	40	40	72	72	83.5
Sample Date	04/27/99	05/19/04	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99
Sample ID	GWGM-40B	GWGM-40B (5/19/04)	GWGM-40B (5/19/04)-DL	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49
Nickel	<50	3.3 B	NA	<50	<50	<50	<50	<50
Nickel-Dissolved	NA	3.1 B	NA	NA	NA	NA	NA	NA
Potassium	10,000	NA	12,000	<1,000 M	4,500	3,400	2,700	2,600
Potassium-Dissolved	NA	NA	13,000	NA	NA	NA	NA	NA
Selenium	<5	**8**	NA	<5	<5	<5	<5	<5
Selenium-Dissolved	NA	**7.9**	NA	NA	NA	NA	NA	NA
Silver	<2.5 M	<0.20	NA	<0.5	<0.5	<0.5	<0.5	<0.5
Silver-Dissolved	NA	<0.20	NA	NA	NA	NA	NA	NA
Sodium	75,000	NA	88,000	32,000	38,000	7,200	6,400	5,900
Sodium-Dissolved	NA	NA	89,000	NA	NA	NA	NA	NA
Thallium	<5 M	<2.0	NA	<2	<2	<2	<2	<2
Thallium-Dissolved	NA	<2.0	NA	NA	NA	NA	NA	NA
Titanium	480	360	NA	<50	<50	<50	<50	<50
Titanium-Dissolved	NA	350	NA	NA	NA	NA	NA	NA
Vanadium	**57**	**39**	NA	<20	<20	<20	<20	<20
Vanadium-Dissolved	NA	**38**	NA	NA	NA	NA	NA	NA
Zinc	<20	3.9 B	NA	<20	<20	<20	<20	<20
Zinc-Dissolved	NA	4.9 B	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-50		GM-51		GM-52	GM-53A	GM-53B		GM-54	
Top of Screen Depth (ft bls)	80.5	80.5	67	67	75	79	195	195	80	80
Sample Date	10/14/98	04/17/99	10/20/98	04/18/99	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98	05/01/99
Sample ID	GWGM-50	GWGM-50	GWGM-51	GWGM-51	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54	GWGM-54
Aluminum	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	<5	<5	5.4	<5	<5	<5 J	20	<5	<5	15
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	<200	370	<200	<200	<200	<200	280	300	<200 J	<200
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	140,000	140,000	65,000	73,000	65,000	53,000	130,000	110,000 J	27,000	29,000 J
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	<50	<50	<50	<50	<50	<50	<50	<50	<50 J	<50
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	<50	<50	<50	<50	<50	<50	<50	<50	<50 J	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	<25	<25	<25	<25	<25	<25	<25	<25	<25 J	<25
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	2,500	15,000	75	380	<20	2,300	8,300	13,000	<20	400
Iron-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	36,000	100,000	31,000	34,000	24,000	23,000	110,000	99,000	10,000 J	11,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	1600	560	70	100	79	**2,000**	720	120 J	39 J	37 J
Manganese-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2 J	<0.2	<0.2	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	<100	<100	<100	<100	<100	<100	<100	<100	<100 J	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-50		GM-51		GM-52	GM-53A	GM-53B		GM-54	
Top of Screen Depth (ft bls)	80.5	80.5	67	67	75	79	195	195	80	80
Sample Date	10/14/98	04/17/99	10/20/98	04/18/99	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98	05/01/99
Sample ID	GWGM-50	GWGM-50	GWGM-51	GWGM-51	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54	GWGM-54
Nickel	<50	<50	<50	<50	<50	<50	<50	<50	<50 J	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	3,300	11,000	2,500	2,200	1,000	2,300	3,700	2,800	1,600	1,500
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	<5	<5	<5	<5	<5	<5 J	<5	<5	<5	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	<0.5	<0.5	**0.63**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	49,000	17,000	4,200	6,300	1,800	19,000	7,900	7,800	2,900	2,700
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	<50	<50	<50	<50	<50	<50	<50	<50	<50 J	<50
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	<20	<20	<20	<20	<20	<20	<20	<20	<20 J	<20
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	28	<20	<20	<20	<20	<20	<20	<20	<20 J	<20
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-55			GM-56		GM-57	GM-58	GM-59	
Top of Screen Depth (ft bls)	75	75	75	32	32	76	75	114	114
Sample Date	10/24/98	05/01/99	05/01/99	10/21/98	04/20/99	04/20/99	04/26/99	11/17/98	04/28/99
Sample ID	GWGM-55	GWGM-55	GWGM-85	GWGM-56	GWGM-56	GWGM-57	GWGM-58	GWGM-59	GWGM-59
Aluminum	<200	<200	<200	<200	<200	<200	<200	<200	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	<50	<50	<50	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	21	<5	74	<5	<5	<5	<5	<5	<5
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	<200 J	<200	<200	<200	<200	<200	<200	<200	<200
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	<5	<5	<5	<5	<5	<5	<5	<5	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	82,000	70,000 J	77,000 J	66,000	85,000	74,000	65,000	61,000	63,000
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	<50 J	<50	<50	<50	<50	<50	<50	<50	<50
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	<50 J	<50	<50	<50	<50	<50	<50	<50	<50
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	<25 J	<25	<25	<25	<25	<25	<25	<25	<25
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	3,000 J	2,200	2,500	<20	230	44	24	78 J	150
Iron-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	<3	<3	<3	<3	<3	<3	<3	<3	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	45,000 J	37,000	42,000	27,000	33,000	37,000	33,000	25,000	27,000
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	630	610 J	670 J	580	570	160	74	210	150
Manganese-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	<100 J	<100	<100	<100	<100	<100	<100	<100	<100
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-55			GM-56		GM-57	GM-58	GM-59	
Top of Screen Depth (ft bls)	75	75	75	32	32	76	75	114	114
Sample Date	10/24/98	05/01/99	05/01/99	10/21/98	04/20/99	04/20/99	04/26/99	11/17/98	04/28/99
Sample ID	GWGM-55	GWGM-55	GWGM-85	GWGM-56	GWGM-56	GWGM-57	GWGM-58	GWGM-59	GWGM-59
Nickel	<50 J	<50	<50	<50	<50	<50	<50	<50	<50
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	3,100	2,300	2,500	2,200	2,500	2,200	2,100	1,700	1,700
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	<5	<5	<5	<5	<5 J	<5	<5	<5	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	25,000	19,000	21,000	26,000	8,200	22,000	12,000	6,700	7,800
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	<50 J	<50	<50	<50	<50	<50	<50	<50	<50
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	<20 J	<20	<20	<20	<20	<20	<20	<20	<20
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	<20 J	<20	<20	<20	<20	<20	<20	21	<20
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-60	GM-61	GM-62A			GM-62B	
Top of Screen Depth (ft bls)	102	138	90	90	90	195	195
Sample Date	05/12/99	05/03/99	08/23/99	05/11/04	05/11/04	08/24/99	08/24/99
Sample ID	GWGM-60	GWGM-61	GWGM-62A	GWGM-62A (5/11/04)	GWGM-62A (5/11/04)-DL	GWGM-62B	GWGM-82
Aluminum	<200	<200	20 B	39 B	NA	68 B	77 B
Aluminum-Dissolved	NA	NA	NA	40 B	NA	NA	NA
Antimony	<50	<50	2.2 B	<50	NA	4.1 B	3.4 B
Antimony-Dissolved	NA	NA	NA	<50	NA	NA	NA
Arsenic	<5	<5	16 B	10 B	NA	59	63
Arsenic-Dissolved	NA	NA	NA	8.2 B	NA	NA	NA
Barium	<200	<200	160	71 B	NA	**1100**	**1100**
Barium-Dissolved	NA	NA	NA	65 B	NA	NA	NA
Beryllium	<5	<5	<1.0	<1.0	NA	<1.0	<1.0
Beryllium-Dissolved	NA	NA	NA	<1.0	NA	NA	NA
Cadmium	<0.5	<0.5	<0.50	<0.50 *F5	NA	<0.50	<0.50
Cadmium-Dissolved	NA	NA	NA	<0.50 *F5	NA	NA	NA
Calcium	110,000	62,000	160,000 J	150,000	NA	650,000 J	680,000 J
Calcium-Dissolved	NA	NA	NA	140,000	NA	NA	NA
Chromium	<50	<50	6.7	10	NA	**30**	**31**
Chromium-Dissolved	NA	NA	NA	2.8 B	NA	NA	NA
Cobalt	<50	<50	2.5 B	1.8 B	NA	16	17
Cobalt-Dissolved	NA	NA	NA	1.6 B	NA	NA	NA
Copper	<25	<25	<25	4.4 B	NA	4.7 B	2.6 B
Copper-Dissolved	NA	NA	NA	<25	NA	NA	NA
Iron	<20	<130	12,000	5,900	NA	48,000	50,000
Iron-Dissolved	NA	NA	NA	4,300	NA	NA	NA
Lead	<3	<3	<3.0	<3.0	NA	<3.0	<3.0
Lead-Dissolved	NA	NA	NA	<3.0	NA	NA	NA
Magnesium	60,000	31,000	71,000	62,000	NA	280,000	290,000
Magnesium-Dissolved	NA	NA	NA	60,000	NA	NA	NA
Manganese	9.6	730	1,600	910	NA	**4,900**	**5,200**
Manganese-Dissolved	NA	NA	NA	870	NA	NA	NA
Mercury	<0.2	<0.2	<0.20	<0.20	NA	<0.20	<0.20
Mercury-Dissolved	NA	NA	NA	<0.20	NA	NA	NA
Molybdenum	<100	<100	14 J	2.2 B	NA	4.5 J	5.0 J
Molybdenum-Dissolved	NA	NA	NA	6.8 B	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-60	GM-61	GM-62A			GM-62B	
Top of Screen Depth (ft bls)	102	138	90	90	90	195	195
Sample Date	05/12/99	05/03/99	08/23/99	05/11/04	05/11/04	08/24/99	08/24/99
Sample ID	GWGM-60	GWGM-61	GWGM-62A	GWGM-62A (5/11/04)	GWGM-62A (5/11/04)-DL	GWGM-62B	GWGM-82
Nickel	<50	<50	4.5 B	8.3 B	NA	9.4 B	10 B
Nickel-Dissolved	NA	NA	NA	7.8 B	NA	NA	NA
Potassium	2,200	15,000	15,000 J	NA	20,000	9,100 J	9,300 J
Potassium-Dissolved	NA	NA	NA	NA	19,000	NA	NA
Selenium	<5	<5	<25	<5.0	NA	<10	<25
Selenium-Dissolved	NA	NA	NA	<5.0	NA	NA	NA
Silver	<0.5	<36	**0.14 B**	<0.20	NA	<0.20	<0.20
Silver-Dissolved	NA	NA	NA	<0.20	NA	NA	NA
Sodium	43,000	52,000	11,000	17,000	NA	29,000	31,000
Sodium-Dissolved	NA	NA	NA	16,000	NA	NA	NA
Thallium	<2	<2	<2.0	0.40 B*F5	NA	<2.0	<2.0
Thallium-Dissolved	NA	NA	NA	<2.0 *F5	NA	NA	NA
Titanium	<50	<50	5.3 B	3.4 B	NA	240	250
Titanium-Dissolved	NA	NA	NA	1.6 B	NA	NA	NA
Vanadium	<20	<20	7.4 B	7.0 B	NA	**83**	**85**
Vanadium-Dissolved	NA	NA	NA	6.3 B	NA	NA	NA
Zinc	<20	<20	1.8 B	**210**	NA	20 B	13 B
Zinc-Dissolved	NA	NA	NA	17 B	NA	NA	NA

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Table 4-7: Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62B (continued)		GM-62C			GM-63A
Top of Screen Depth (ft bls)	195	195	315	315	315	45
Sample Date	05/19/04	05/19/04	08/24/99	05/18/04	05/18/04	08/29/00
Sample ID	GWGM-62B (5/19/04)	GWGM-62B (5/19/04)-DL	GWGM-62C	GWGM-62C (5/18/04)	GWGM-62C (5/18/04)-DL	GWGM-63A
Aluminum	81 B	NA	55 B	12 B	NA	NA
Aluminum-Dissolved	21 B	NA	NA	<200	NA	<200
Antimony	2.0 B	NA	8.7 B	<50	NA	NA
Antimony-Dissolved	<50	NA	NA	<50	NA	<50
Arsenic	92	NA	110	15 B	NA	NA
Arsenic-Dissolved	89	NA	NA	17 B	NA	3.4 B
Barium	**820**	NA	**950**	67 B	NA	NA
Barium-Dissolved	**780**	NA	NA	130	NA	390 J
Beryllium	<1.0	NA	0.44 B	<1.0	NA	NA
Beryllium-Dissolved	<1.0	NA	NA	<1.0	NA	<1.0
Cadmium	<0.50	NA	<0.50	<0.50	NA	NA
Cadmium-Dissolved	<0.50	NA	NA	<0.50	NA	<0.50
Calcium	NA	460,000	470,000 J	23,000	NA	NA
Calcium-Dissolved	NA	490,000	NA	35,000	NA	98,000
Chromium	**13**	NA	**22**	4.0 B	NA	NA
Chromium-Dissolved	**13**	NA	NA	2.2 B	NA	<5.0
Cobalt	2.6 B	NA	5.6 B	9.5 B	NA	NA
Cobalt-Dissolved	1.4 B	NA	NA	7.6 B	NA	<10
Copper	4.0 B	NA	3.9 B	8.0 B	NA	NA
Copper-Dissolved	<25	NA	NA	<25	NA	<25
Iron	39,000	NA	63,000	980	NA	NA
Iron-Dissolved	43,000	NA	NA	650	NA	41 B
Lead	<3.0	NA	5.6	<3.0	NA	NA
Lead-Dissolved	<3.0	NA	NA	1.4 B	NA	<3.0 J
Magnesium	230,000	NA	320,000	68,000	NA	NA
Magnesium-Dissolved	240,000	NA	NA	75,000	NA	81,000
Manganese	220	NA	380	8.0 B	NA	NA
Manganese-Dissolved	280	NA	NA	11 B	NA	190 J
Mercury	<0.20	NA	<0.20	<0.20	NA	NA
Mercury-Dissolved	<0.20	NA	NA	<0.20	NA	<0.20
Molybdenum	<10	NA	11 J	39	NA	NA
Molybdenum-Dissolved	<10	NA	NA	37	NA	1.3 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62B (continued)		GM-62C			GM-63A
Top of Screen Depth (ft bls)	195	195	315	315	315	45
Sample Date	05/19/04	05/19/04	08/24/99	05/18/04	05/18/04	08/29/00
Sample ID	GWGM-62B (5/19/04)	GWGM-62B (5/19/04)-DL	GWGM-62C	GWGM-62C (5/18/04)	GWGM-62C (5/18/04)-DL	GWGM-63A
Nickel	14 B	NA	7.5 B	36	NA	NA
Nickel-Dissolved	8.7 B	NA	NA	32	NA	<25
Potassium	NA	53,000	8,500 J	NA	630,000	NA
Potassium-Dissolved	NA	41,000	NA	NA	710,000	3,200
Selenium	**5.4**	NA	<10	<5.0	NA	NA
Selenium-Dissolved	**6.3**	NA	NA	2.8 B	NA	<5.0
Silver	<0.20	NA	<0.20	<0.20	NA	NA
Silver-Dissolved	<0.20	NA	NA	<0.20	NA	<0.20
Sodium	NA	29,000	30,000	NA	130,000	NA
Sodium-Dissolved	NA	28,000	NA	NA	160,000	9,100
Thallium	<2.0	NA	<2.0	<2.0	NA	NA
Thallium-Dissolved	<2.0	NA	NA	<2.0	NA	<2.0
Titanium	100	NA	340	31 B	NA	NA
Titanium-Dissolved	98	NA	NA	33 B	NA	0.97 B
Vanadium	**32**	NA	**16 B**	3.2 B	NA	NA
Vanadium-Dissolved	**30**	NA	NA	3.7 B	NA	<20
Zinc	18 B	NA	11 B	6.9 B	NA	NA
Zinc-Dissolved	3.0 B	NA	NA	8.2 B	NA	<25

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A (continued)			GM-63B			GM-64A		
Top of Screen Depth (ft bls)	45	45	45	105	105	105	33	33	33
Sample Date	09/19/00	09/15/03	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00	10/03/00	09/08/03
Sample ID	GWGM-63A	GM-63A	GWGM-63A (5/5/04)	GWGM-63B	GM-63B	GWGM-63B (4/27/04)	GWGM-64A	GWGM-64A	GM-64A
Aluminum	NA	<200	34 B	<150	<200	10 B	NA	NA	<200
Aluminum-Dissolved	<200	<200	29 B	<66	<200	<200	<200	<200	<200
Antimony	NA	<50	<50	<50	<50	<50	NA	NA	<50
Antimony-Dissolved	<50	<50	<50	NA	<50	<50	<50	<50	<50
Arsenic	NA	<20	10 B	30 J	27	16 B	NA	NA	24
Arsenic-Dissolved	<9.7	<20	11 B	30 J	29	22	23	22 J	22
Barium	NA	**410**	**600**	34 B	<100	30 B	NA	NA	**430**
Barium-Dissolved	**620**	**410**	**590**	33 B	<100	29 B	**500**	**430 J**	**430**
Beryllium	NA	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	NA	<0.50 WN	<0.50	<0.50	<0.50	<0.50	NA	NA	<0.50 WN
Cadmium-Dissolved	<0.50	<0.50 WN	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50 WN
Calcium	NA	77,000	110,000	24,000	25,000	24,000	NA	NA	96,000
Calcium-Dissolved	110,000	79,000	110,000	24,000	25,000	24,000	100,000	86,000	95,000
Chromium	NA	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA	<5.0
Chromium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt	NA	<10	<10	<10	<10	<10	NA	NA	<10
Cobalt-Dissolved	<10	<10	<10	NA	<10	<10	5.1 B	4.4 B	<10
Copper	NA	<25	<25	<1.6	<25	<25	NA	NA	<20
Copper-Dissolved	<1.5	<25	<25	<1.6	<25	<25	<0.60	<25	<20
Iron	NA	16,000	25,000	170 J	<100	47 B	NA	NA	11,000
Iron-Dissolved	23,000	17,000	24,000	32 BJ	<100	<100	13,000	10,000	11,000
Lead	NA	<3.0	<3.0	<3.0 J	<3.0	<3.0	NA	NA	<3.0
Lead-Dissolved	<3.0	<3.0	<3.0	<3.0 J	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	NA	64,000	92,000	16,000	17,000	15,000	NA	NA	72,000
Magnesium-Dissolved	90,000	66,000	91,000	15,000	17,000	16,000	96,000	72,000	71,000
Manganese	NA	150	190	66	44	36	NA	NA	1,600
Manganese-Dissolved	210	150	180	62	42	35	1,700	1,700	1,600
Mercury	NA	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	NA	<10	<10	16	<10	7.9 B	NA	NA	<10
Molybdenum-Dissolved	<10	<10	<10	15	<10 B	7.7 B	6.2 B	5.8 B	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A (continued)			GM-63B			GM-64A		
Top of Screen Depth (ft bls)	**45**	**45**	**45**	**105**	**105**	**105**	**33**	**33**	**33**
Sample Date	**09/19/00**	**09/15/03**	**05/05/04**	**02/07/01**	**09/11/03**	**04/27/04**	**08/30/00**	**10/03/00**	**09/08/03**
Sample ID	**GWGM-63A**	**GM-63A**	**GWGM-63A (5/5/04)**	**GWGM-63B**	**GM-63B**	**GWGM-63B (4/27/04)**	**GWGM-64A**	**GWGM-64A**	**GM-64A**
Nickel	NA	<25	<25	<25	<25	<25	NA	NA	<25
Nickel-Dissolved	<25	<25	<25	NA	<25	<25	1.8 B	1.5 B	<25
Potassium	NA	2,700	3,600	4,000	4,000	4,200	NA	NA	3,300
Potassium-Dissolved	3,400	2,800	3,600	3,800	4,000	4,000	3,500	3,000	3,300
Selenium	NA	<5.0	<5.0	<5.0 J	<5.0	<5.0	NA	NA	<5.0
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	NA	<0.20 WN	<0.20	<0.20 J	<0.20 W	<0.20	NA	NA	<0.20 WN
Silver-Dissolved	<0.11	<0.20 WN	<0.20	<0.20 J	<0.20 W	<0.20	<0.20	<0.15 WN	<0.20 WN
Sodium	NA	6,600	10,000	12,000	8,900	8,200	NA	NA	9,200
Sodium-Dissolved	9,900	6,900	10,000	11,000	9,100	8,100	9,400	7,500 J	9,300
Thallium	NA	<2.0 WN	<2.0	<2.0	<2.0	<2.0	NA	NA	<2.0 WN
Thallium-Dissolved	<2.0	<2.0 WN	<2.0	<2.0	<2.0	<2.0	<2.0 J	<2.0 J	<2.0 WN
Titanium	NA	<50	2.4 B	1.3 BJ	<50	0.61 B	NA	NA	<10
Titanium-Dissolved	<0.82	<50	1.8 B	0.66 BJ	<50	<50	1.0 B	0.54 B	<10
Vanadium	NA	<20	2.2 B	<20	<20	0.65 B	NA	NA	<10
Vanadium-Dissolved	<2.2	<20	2.1 B	<20	<20	0.51 B	<5.2	<2.8	<10
Zinc	NA	<20	3.6 B	<20	<20	3.4 B	NA	NA	<20
Zinc-Dissolved	<3.6	<20	3.1 B	<20	<20	1.8 B	<4.9	<1.4	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)	GM-64B				GM-66A		
Top of Screen Depth (ft bls)	33	117	117	117	117	27	27	27
Sample Date	05/04/04	07/24/00	10/04/00	09/08/03	05/11/04	07/18/00	09/16/03	04/27/04
Sample ID	GWGM-64A (5/4/04)	GWGM-64B	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A	GWGM-66A (4/27/04)
Aluminum	60 B	NA	NA	<200	15 B	NA	<200	<200
Aluminum-Dissolved	30 B	<26	NA	<200	<200	<29	<200	<200
Antimony	<50	NA	NA	<50	<50	NA	<50	<50
Antimony-Dissolved	<50	<50	NA	<50	<50	<50	<50	<50
Arsenic	27	NA	NA	<10	12 B	NA	70	78
Arsenic-Dissolved	27	4.0 B	NA	<10	13 B	33	72	74
Barium	**550**	NA	NA	**410**	**410**	NA	<100	68 B
Barium-Dissolved	**530**	260	NA	**410**	**420**	49 B	<100	65 B
Beryllium	<1.0	NA	NA	<1.0	<1.0	NA	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50	NA	NA	<0.50 WN	<0.50 *F5	NA	<0.50 WN	<0.50
Cadmium-Dissolved	<0.50	<0.50	NA	<0.50 WN	<0.50 *F5	<0.50	<0.50 WN	<0.50
Calcium	100,000	NA	NA	150,000	140,000	NA	96,000	100,000
Calcium-Dissolved	100,000	120,000	120,000	150,000	150,000	89,000	97,000	99,000
Chromium	<5.0	NA	NA	<5.0	0.59 B	NA	<5.0	<5.0
Chromium-Dissolved	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt	6.3 B	NA	NA	<10	2.1 B	NA	<10	<10
Cobalt-Dissolved	6.0 B	1.4 B	NA	<10	1.9 B	<10	<10	<10
Copper	<25	NA	NA	<20	<25	NA	<25	<25
Copper-Dissolved	<25	<0.99	NA	<20	<25	<25	<25	<25
Iron	16,000	NA	NA	8,300	8,800	NA	4,700	5,300
Iron-Dissolved	16,000	190	4,300	8,000	8,900	320	4,700	4,900
Lead	<3.0	NA	NA	<3.0	<3.0	NA	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	NA	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	96,000	NA	NA	120,000	110,000	NA	55,000	56,000
Magnesium-Dissolved	95,000	95,000	95,000	120,000	110,000	51000	55,000	55,000
Manganese	1,400	NA	NA	330	280	NA	540	550
Manganese-Dissolved	1,400	330	NA	320	270	520	540	550
Mercury	<0.20	NA	NA	<0.20	<0.20	NA	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	NA	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	4.9 B	NA	NA	<10	3.0 B	NA	<10	2.8 B
Molybdenum-Dissolved	5.9 B	21	NA	<10	4.9 B	3.3 B	<10	3.1 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)	GM-64B				GM-66A		
Top of Screen Depth (ft bls)	33	117	117	117	117	27	27	27
Sample Date	05/04/04	07/24/00	10/04/00	09/08/03	05/11/04	07/18/00	09/16/03	04/27/04
Sample ID	GWGM-64A (5/4/04)	GWGM-64B	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A	GWGM-66A (4/27/04)
Nickel	3.4 B	NA	NA	<25	1.8 B	NA	<25	<25
Nickel-Dissolved	3.2 B	<25	NA	<25	1.1 B	<25	<25	1.3 B
Potassium	3,800	NA	NA	4,100	4,500	NA	3,100	3,400
Potassium-Dissolved	3,800	4,200	3,700	4,200	4,700	2,700	3,100	3,300
Selenium	<5.0	NA	NA	<5.0	<5.0	NA	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	<0.20	NA	NA	<0.20 WN	<0.20	NA	<0.20 WN	<0.20
Silver-Dissolved	<0.20	<0.20	NA	<0.20 WN	<0.20	<0.20	<0.20 WN	<0.20
Sodium	11,000	NA	NA	12,000	11,000	NA	NA	NA
Sodium-Dissolved	11,000	43,000	31,000 J	12,000	11,000	24,000	NA	NA
Thallium	<2.0	NA	NA	<2.0 WN	0.35 B*F5	NA	<2.0 WN	<2.0
Thallium-Dissolved	<2.0	<2.0	NA	<2.0 WN	0.55 B*F5	<2.0	<2.0 WN	<2.0
Titanium	2.6 B	NA	NA	<10	1.5 B	NA	<50	<50
Titanium-Dissolved	1.5 B	0.26 B	NA	<10	1.3 B	<50	<50	0.51 B
Vanadium	3.7 B	NA	NA	<10	8.1 B	NA	<20	<20
Vanadium-Dissolved	3.0 B	<20	NA	<10	7.8 B	<20	<20	<20
Zinc	24	NA	NA	27	3.9 B	NA	<20	<20
Zinc-Dissolved	0.72 B	<1.8	NA	<20	8.6 B	1.7 BJ	<20	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A (continued)			GM-66B			
Top of Screen Depth (ft bls)	27	27	27	125	125	125	125
Sample Date	04/27/04	07/27/05	09/16/03	07/19/00	08/03/00	09/11/03	05/10/04
Sample ID	GWGM-66A (4/27/04)-DL	GWGM66A (072705)	GM-66A-DL	GWGM-66B	GMGW-66B	GM-66B	GWGM-66B (5/10/04)
Aluminum	NA	<200	NA	NA	NA	<200	390
Aluminum-Dissolved	NA	<200	NA	<29	<21	<200	20 B
Antimony	NA	<50	NA	NA	NA	<50	<50
Antimony-Dissolved	NA	<50	NA	<50	<50	<50	<50
Arsenic	NA	82	NA	NA	NA	57	60
Arsenic-Dissolved	NA	74	NA	11	<11	57	54
Barium	NA	64 J	NA	NA	NA	280	290
Barium-Dissolved	NA	62 J	NA	220	200	280	270
Beryllium	NA	<1.0	NA	NA	NA	<1.0	<1.0
Beryllium-Dissolved	NA	<1.0	NA	<1.0	<1	<1.0	<1.0
Cadmium	NA	<0.50	NA	NA	NA	<0.50	<0.50 *F5
Cadmium-Dissolved	NA	0.11 J	NA	<0.50	<0.5 W	<0.50	<0.50 *F5
Calcium	NA	98,000	NA	NA	NA	110,000	110,000
Calcium-Dissolved	NA	98,000	NA	110,000	110,000	110,000	100,000
Chromium	NA	7	NA	NA	NA	<5.0	1.9 B
Chromium-Dissolved	NA	<5.0	NA	<5.0	<0.82	<5.0	0.56 B
Cobalt	NA	0.71 J	NA	NA	NA	<10	0.88 B
Cobalt-Dissolved	NA	0.60 J	NA	1.1 B	0.72 B	<10	<10
Copper	NA	<25	NA	NA	NA	<25	<25
Copper-Dissolved	NA	<25	NA	<25	0.51 B	<25	<25
Iron	NA	6,600	NA	NA	NA	14,000	14,000
Iron-Dissolved	NA	5,900	NA	170	330 J	14,000	12,000
Lead	NA	<3.0	NA	NA	NA	<3.0	<3.0
Lead-Dissolved	NA	0.50 J	NA	<3.0	<3	<3.0	<3.0
Magnesium	NA	53,000	NA	NA	NA	110,000	110,000
Magnesium-Dissolved	NA	55,000	NA	130,000	130,000	120,000	110,000
Manganese	NA	530	NA	NA	NA	36	52
Manganese-Dissolved	NA	590	NA	240	140	36	33
Mercury	NA	<0.20	NA	NA	NA	<0.20	<0.20
Mercury-Dissolved	NA	<0.20	NA	<0.20	<0.2 J	<0.20	<0.20
Molybdenum	NA	1.9 J	NA	NA	NA	<10	1.4 B
Molybdenum-Dissolved	NA	2.4 J	NA	4.9 B	2.9 B	<10	1.6 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A (continued)			GM-66B			
Top of Screen Depth (ft bls)	27	27	27	125	125	125	125
Sample Date	04/27/04	07/27/05	09/16/03	07/19/00	08/03/00	09/11/03	05/10/04
Sample ID	GWGM-66A (4/27/04)-DL	GWGM66A (072705)	GM-66A-DL	GWGM-66B	GMGW-66B	GM-66B	GWGM-66B (5/10/04)
Nickel	NA	0.59 J	NA	NA	NA	<25	2.1 B
Nickel-Dissolved	NA	0.91 J	NA	1.1 B	<25	<25	1.7 B
Potassium	NA	2400	NA	NA	NA	4,300	5,000
Potassium-Dissolved	NA	2600	NA	6,000	5,500	4,400	4,600
Selenium	NA	<5.0	NA	NA	NA	<5.0	<5.0
Selenium-Dissolved	NA	<5.0	NA	<5.0	<5 J	<5.0	<5.0
Silver	NA	<0.20	NA	NA	NA	<0.20 W	<0.20
Silver-Dissolved	NA	<0.20	NA	<0.20	<0.2 J	<0.20 W	**0.12 B**
Sodium	43,000	40,000	39,000	NA	NA	17,000	18,000
Sodium-Dissolved	42,000	42,000	39,000	18,000	18,000	18,000	17,000
Thallium	NA	0.46 J	NA	NA	NA	<2.0	0.50 B*F5
Thallium-Dissolved	NA	0.25 J	NA	<2.0	<2	<2.0	0.60 B*F5
Titanium	NA	2.6 J	NA	NA	NA	<50	7.7 B
Titanium-Dissolved	NA	2.0 J	NA	0.29 B	<0.27	<50	2.0 B
Vanadium	NA	**22**	NA	NA	NA	<20	7.6 B
Vanadium-Dissolved	NA	<20	NA	<1.1	<2	<20	6.3 B
Zinc	NA	<20	NA	NA	NA	<20	11 B
Zinc-Dissolved	NA	<20	NA	4.0 BJ	<1.4	<20	3.2 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)		GM-67	GM-68		GM-70	GM-71	GM-72
Top of Screen Depth (ft bls)	125	125	122	140	140	42	39	43
Sample Date	12/08/06	07/27/05	08/07/00	08/31/00	09/26/00	08/17/00	08/21/00	08/22/00
Sample ID	GWGM-66B (12/8/06)	GWGM66B (072705)	GWGM-67	GWGM-68	GWGM-68	GWGM-70	GWGM-71	GWGM-72
Aluminum	34 J	300	<33	NA	NA	NA	NA	NA
Aluminum-Dissolved	<200	<200	NA	<200	<200	<36	<49	<200
Antimony	<50	<50	<50	NA	NA	NA	NA	NA
Antimony-Dissolved	<50	<50	NA	<50	<50	<50	<50	<50
Arsenic	78	65	9.7 BJ	NA	NA	NA	NA	NA
Arsenic-Dissolved	92	56	NA	<20 J	<2.6	7.0 B	11 B	40
Barium	190	250	180	NA	NA	NA	NA	NA
Barium-Dissolved	210 B	240	NA	69 B	63 BJ	180	87 BJ	190 J
Beryllium	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA
Beryllium-Dissolved	<1.0	<1.0	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA
Cadmium-Dissolved	<0.50	0.12 J	NA	<0.12 W	<0.50	<0.50	<0.50	<0.50
Calcium	80,000	110,000	68,000	NA	NA	NA	NA	NA
Calcium-Dissolved	92,000	100,000	NA	52,000	51,000	130,000	120,000	680,000
Chromium	<5.0	1.9 J	<5.0	NA	NA	NA	NA	NA
Chromium-Dissolved	<5.0	<5.0	NA	<5.0	<5.0	<4.6	<3.3	9.9
Cobalt	0.54 J	1.3 J	<10	NA	NA	NA	NA	NA
Cobalt-Dissolved	0.73 J	1.1 J	NA	<10	<10	2.2 B	14	1.2 B
Copper	0.83 J	0.59 J	<25	NA	NA	NA	NA	NA
Copper-Dissolved	<25	0.61 J	NA	<1.0	<25	<25 J	<25	<25
Iron	9,700	15,000	3,800	NA	NA	NA	NA	NA
Iron-Dissolved	11,000	12,000	NA	<100	<100	5,700	34,000	1,300
Lead	<3.0	<3.0	<3.0	NA	NA	NA	NA	NA
Lead-Dissolved	<3.0	0.60 J	NA	<3.0	<3.0	<3.0	<3.0 J	<3.0 J
Magnesium	79,000	110,000	37,000	NA	NA	NA	NA	NA
Magnesium-Dissolved	91,000	100,000	NA	24,000	25,000	35,000	34,000	27,000
Manganese	35	39	1,300	NA	NA	NA	NA	NA
Manganese-Dissolved	38	33	NA	120	49 J	1,600	2,000 J	1,800 J
Mercury	<0.20	<0.20	<0.20 J	NA	NA	NA	NA	NA
Mercury-Dissolved	<0.20	<0.20	NA	<0.20	<0.20	<0.20	<0.20	1.4
Molybdenum	<10	1.7 J	8.1 B	NA	NA	NA	NA	NA
Molybdenum-Dissolved	1.7 J	2.1 J	NA	28	20	6.2 B	<10	3.0 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)		GM-67	GM-68		GM-70	GM-71	GM-72
Top of Screen Depth (ft bls)	125	125	122	140	140	42	39	43
Sample Date	12/08/06	07/27/05	08/07/00	08/31/00	09/26/00	08/17/00	08/21/00	08/22/00
Sample ID	GWGM-66B (12/8/06)	GWGM66B (072705)	GWGM-67	GWGM-68	GWGM-68	GWGM-70	GWGM-71	GWGM-72
Nickel	0.97 J	1.6 J	<25	NA	NA	NA	NA	NA
Nickel-Dissolved	1.1 J	1.7 J	NA	<25	<25	<25	5.8 B	2.8 B
Potassium	2,900	3,600	2,600	NA	NA	NA	NA	NA
Potassium-Dissolved	3,600	3,600	NA	2,600	2,300	5,500	5,400	12,000
Selenium	<5.0	<5.0	<5.0	NA	NA	NA	NA	NA
Selenium-Dissolved	<5.0	<5.0	NA	<5.0 J	<5.0	<5.0	<5.0	<5.0
Silver	<0.20	<0.20	<0.20	NA	NA	NA	NA	NA
Silver-Dissolved	<0.20	<0.20	NA	<0.20	<0.20	<0.20	<0.20	<0.20
Sodium	14,000	16,000	17,000	NA	NA	NA	NA	NA
Sodium-Dissolved	17,000	16,000	NA	20,000 J	9,300	49,000 J	5,300	76,000
Thallium	<2.0	<2.0	<2.0	NA	NA	NA	NA	NA
Thallium-Dissolved	<2.0	<2.0	NA	<2.0 J	<2.0	<2.0	<2.0	<2.0
Titanium	2.9 J	11 J	<0.62	NA	NA	NA	NA	NA
Titanium-Dissolved	4.3 J	4.6 J	NA	<0.30	<50	4.3 B	<0.49	45 B
Vanadium	<20	3.8 J	1.4 B	NA	NA	NA	NA	NA
Vanadium-Dissolved	<20	<20	NA	<0.78	<20	<7.0	<2.4	27
Zinc	9.1 J	15 J	<3.3 J	NA	NA	NA	NA	NA
Zinc-Dissolved	17 J B	6.4 J	NA	<24	<20	3.4 B	<5.3	<9.1

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-72 (continued)						GM-72A		GM-73
Top of Screen Depth (ft bls)	43	43	43	43	43	43	46	46	42
Sample Date	09/24/03	01/05/04	04/16/04	04/16/04	09/24/03	01/05/04	07/25/05	12/12/06	09/06/00
Sample ID	GM-72	GWGM-72	GM-72	GM-72-DL	GM-72-DL	GWGM-72-DL	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)	GWGM-73
Aluminum	1,200	300	990	NA	NA	NA	2,800	1,000	NA
Aluminum-Dissolved	<200	<200	<200	NA	NA	NA	16 J	77 J B	<9.7
Antimony	<50	<50	<50	NA	NA	NA	2.5 J	3.2 J	NA
Antimony-Dissolved	<50	<50	<50	NA	NA	NA	<50	<50	<50
Arsenic	30	26	21	NA	NA	NA	60 B	28	NA
Arsenic-Dissolved	28	28	20	NA	NA	NA	50 B	25	<20 J
Barium	210	140	180	NA	NA	NA	390	260	NA
Barium-Dissolved	140	100	110	NA	NA	NA	180	160 B	200
Beryllium	<1.0	<1.0	<1.0	NA	NA	NA	0.17 J	<1.0	NA
Beryllium-Dissolved	<1.0	<1.0	<1.0	NA	NA	NA	<1.0	<1.0	<1.0
Cadmium	<0.50	<0.50	<0.50	NA	NA	NA	0.31 J	<0.50	NA
Cadmium-Dissolved	<0.50	<0.50	<0.50	NA	NA	NA	<0.50	<0.50	<0.11
Calcium	NA	NA	NA	650,000	630,000	630,000	750,000	690,000	NA
Calcium-Dissolved	NA	NA	NA	650,000	620,000	640,000	730,000	780,000 B	210,000
Chromium	**14**	10	**14**	NA	NA	NA	**21 B**	**15**	NA
Chromium-Dissolved	8.9	9.2	8.3	NA	NA	NA	**12 B**	9.3	<5.0
Cobalt	<10	<10	4.4 B	NA	NA	NA	12	6.1 J	NA
Cobalt-Dissolved	<10	<10	<10	NA	NA	NA	1.9 J	2.1 J	<10
Copper	***37***	<25	***30***	NA	NA	NA	**15 J**	**11 J**	NA
Copper-Dissolved	<25	<25	<25	NA	NA	NA	0.81 J B	0.99 J	<2.5
Iron	4,200	1,600	9,100	NA	NA	NA	15,000	35,000	NA
Iron-Dissolved	190	210	170	NA	NA	NA	55 J	1,600	19 B
Lead	<3.0	<3.0	<3.0	NA	NA	NA	3.4	1.1 J	NA
Lead-Dissolved	<3.0	<3.0	<3.0	NA	NA	NA	<3.0	<3.0	<1.4
Magnesium	27,000	27,000	27,000	NA	NA	NA	33,000	28,000	NA
Magnesium-Dissolved	27,000	26,000	27,000	NA	NA	NA	32,000	27,000 B	42,000
Manganese	**2,500**	**2,200**	**2,300**	NA	NA	NA	**2,400**	**2,400**	NA
Manganese-Dissolved	**2,400**	**2,200**	**2,300**	NA	NA	NA	**2,500**	**2,300**	69
Mercury	<0.20	<0.20	<0.20	NA	NA	NA	<0.20	<0.20	NA
Mercury-Dissolved	<0.20	<0.20	<0.20	NA	NA	NA	<0.20	<0.20	<0.20
Molybdenum	<10	<10	1.3 B	NA	NA	NA	4.5 J	1.8 J	NA
Molybdenum-Dissolved	<10	<10	<10	NA	NA	NA	<10	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-72 (continued)						GM-72A		GM-73
Top of Screen Depth (ft bls)	43	43	43	43	43	43	46	46	42
Sample Date	09/24/03	01/05/04	04/16/04	04/16/04	09/24/03	01/05/04	07/25/05	12/12/06	09/06/00
Sample ID	GM-72	GWGM-72	GM-72	GM-72-DL	GM-72-DL	GWGM-72-DL	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)	GWGM-73
Nickel	<25	<25	7.7 B	NA	NA	NA	17 J B	14 J	NA
Nickel-Dissolved	<25	<25	3.6 B	NA	NA	NA	6.9 J	4.5 J B	<2.4
Potassium	16,000	14,000	16,000	NA	NA	NA	10,000	11,000	NA
Potassium-Dissolved	16,000	14,000	15,000	NA	NA	NA	9,800	11,000	19,000
Selenium	<5.0	<5.0	<5.0	NA	NA	NA	0.64 J	0.64 J	NA
Selenium-Dissolved	<5.0	<5.0	<5.0	NA	NA	NA	0.51 J	<5.0	<5.0 J
Silver	<0.20	<0.20	**0.095 B*F5**	NA	NA	NA	<0.20	<0.20	NA
Silver-Dissolved	<0.20	<0.20	**0.085 B*F5**	NA	NA	NA	<0.20	<0.20	<0.20 J
Sodium	NA	NA	NA	140,000	120,000	120,000	88,000	170,000	NA
Sodium-Dissolved	NA	NA	NA	140,000	120,000	120,000	88,000	170,000	31,000 J
Thallium	<2.0	<2.0	<2.0 *F5	NA	NA	NA	<2.0	<2.0	NA
Thallium-Dissolved	<2.0	<2.0	<2.0 *F5	NA	NA	NA	<2.0	<2.0	<2.0
Titanium	130	NA	120	NA	NA	<130	300	190	NA
Titanium-Dissolved	69	NA	65	NA	NA	<130	140	100	<0.51
Vanadium	**29**	**26**	**24**	NA	NA	NA	**42**	**35**	NA
Vanadium-Dissolved	**24**	**24**	**22**	NA	NA	NA	**35**	**28**	<20
Zinc	<20	<20	29	NA	NA	NA	29	67	NA
Zinc-Dissolved	<20	<20	11 B	NA	NA	NA	<20	14 J	<7.7

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-74	GM-75	GM-76			GM-77		
Top of Screen Depth (ft bls)	34	24	3	3	3	105	105	105
Sample Date	09/07/00	09/08/00	01/29/01	01/29/01	09/09/05	09/22/03	05/11/04	07/28/05
Sample ID	GWGM-74	GWGM-75	DUP.012901	GWGM-76	GWGM-76 (9/9/05)	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)
Aluminum	NA	NA	<99	<89	200	<200	86 B	<200
Aluminum-Dissolved	<18	<200	<32	<45	<200	<200	<200	<200
Antimony	NA	NA	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	<50	<50	<50	<50	<50	<50	<50	<50
Arsenic	NA	NA	<20	<20	<20	<20	8.5 B	16 J
Arsenic-Dissolved	<20 J	<20 J	<20	<20	<20	<20	8.4 B	11 J
Barium	NA	NA	81 B	82 B	38 J	160	130	120
Barium-Dissolved	58 B	39 B	81 B	81 B	37 J	160	120	110
Beryllium	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	NA	NA	<0.50 J	<0.50 J	<0.50	<0.50	<0.50 *F5	<0.50
Cadmium-Dissolved	<0.11	<0.50	<0.50 W	<0.50	<0.50	<0.50	<0.50 *F5	<0.50
Calcium	NA	NA	96,000	96,000	93,000	94,000	85,000	100,000
Calcium-Dissolved	53,000	35,000	95,000	95,000	85,000	94,000	83,000	99,000
Chromium	NA	NA	<5.0	<5.0	<5.0	<5.0	1.7 B	<5.0
Chromium-Dissolved	<3.4	<5.0	<5.0	<5.0	<5.0	<5.0	1.3 B	<5.0
Cobalt	NA	NA	<10	<10	0.38 J	<10	1.3 B	1.6 J
Cobalt-Dissolved	<10	<10	<10	<10	0.21 J	<10	1.1 B	1.5 J
Copper	NA	NA	2.0 B	<2.5	1.3 J B	<25	<25	<25
Copper-Dissolved	<1.1	<2.6	<1.6	<1.5	0.65 J	<25	<25	<25
Iron	NA	NA	100 J	96 J	240	9,000	6,100	11,000
Iron-Dissolved	<15	13 B	<100 J	<100 J	<100	9,700	6,200	10,000
Lead	NA	NA	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Lead-Dissolved	<1.7	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	0.50 J
Magnesium	NA	NA	53,000	53,000	45,000	110,000	100,000	110,000
Magnesium-Dissolved	19,000	14,000	52,000	52,000	43,000	110,000	98,000	110,000
Manganese	NA	NA	79	80	98	540	590	320
Manganese-Dissolved	16 B	170	76	76	69	490	570	330
Mercury	NA	NA	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	NA	NA	<10	<10	<10	16	18	5.5 J
Molybdenum-Dissolved	9.4 B	<10	<10	<10	<10	14	17	5.4 J

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-74	GM-75	GM-76			GM-77		
Top of Screen Depth (ft bls)	34	24	3	3	3	105	105	105
Sample Date	09/07/00	09/08/00	01/29/01	01/29/01	09/09/05	09/22/03	05/11/04	07/28/05
Sample ID	GWGM-74	GWGM-75	DUP.012901	GWGM-76	GWGM-76 (9/9/05)	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)
Nickel	NA	NA	<25	<25	1.1 J B	<25	1.4 B	0.54 J
Nickel-Dissolved	<25	<1.2	<25	<25	0.82 J	<25	<25	0.55 J
Potassium	NA	NA	1,000	1,000	1,200	5,300	4,600	4,000
Potassium-Dissolved	3,500	1,300	960 J	970 J	1,100	5,200	4,500	4,000
Selenium	NA	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0 J	<5.0 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	NA	NA	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Silver-Dissolved	<0.20	<0.13	<0.20 W	<0.20	<0.20	<0.20	<0.20	<0.20
Sodium	NA	NA	4,600	4,600	7,300	20,000	17,000	18,000
Sodium-Dissolved	2,700 J	2,600 J	4,400	4,600	6,800	20,000	17,000	18,000
Thallium	NA	NA	<2.0	<2.0	<2.0	<2.0	0.35 B*F5	<2.0
Thallium-Dissolved	<2.0	1.5 BJ	<2.0 W	<2.0	<2.0	<2.0	<2.0 *F5	<2.0
Titanium	NA	NA	3.1 B	3.0 B	8.6 J	<50	4.7 B	4.7 J
Titanium-Dissolved	<0.43	<0.38	<50	<50	1.7 J	<50	1.3 B	3.8 J
Vanadium	NA	NA	<20	<20	3.1 J	<20	8.4 B	5.0 J
Vanadium-Dissolved	<1.1	<20	<20	<20	<20	<20	7.6 B	4.1 J
Zinc	NA	NA	<6.9	<5.4	<20	<20	8.0 B	<20
Zinc-Dissolved	2.2 BJ	<3.6	<3.3	<7.9	<20	<20	1.7 B	8.3 J

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78					GM-79
Top of Screen Depth (ft bls)	20	20	20	20	20	25
Sample Date	09/18/03	04/29/04	07/29/05	07/29/05	12/08/06	09/18/03
Sample ID	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)
Aluminum	<200	20 B	<200	17 J	41 J	<200
Aluminum-Dissolved	<200	<200	13 J	<200	<200	<200
Antimony	<50	<50	<50	<50	<50	<50
Antimony-Dissolved	<50	<50	14 J	<50	<50	<50
Arsenic	<20	12 B	12 J	13 J	9.3 J	<20
Arsenic-Dissolved	<20	6.8 B	12 J	11 J	9.3 J	<20
Barium	310	280	360	380	320	230
Barium-Dissolved	330	280	360	340	330 B	220
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50 WN	<0.50	0.14 J	0.18 J	<0.50	<0.50 WN
Cadmium-Dissolved	<0.50 WN	<0.50	0.10 J	<0.50	<0.50	<0.50 WN
Calcium	110,000	100,000	20,000	21,000	83,000	90,000
Calcium-Dissolved	110,000	110,000	100,000	99,000	87,000	84,000
Chromium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chromium-Dissolved	<5.0	<5.0	4.0 J	<5.0	<5.0	<5.0
Cobalt	<10	<10	0.25 J	0.27 J	<10	<10
Cobalt-Dissolved	<10	<10	0.37 J	0.26 J	0.24 J	<10
Copper	<25	<25	<25	1.5 J	0.66 J	<25
Copper-Dissolved	<25	<25	0.47 J	<25	<25	<25
Iron	5,200	10,000	2,200	2,300	7,600	4,300
Iron-Dissolved	5,500	8,900	11,000	11,000	7,900	4,300
Lead	<3.0	<3.0	0.67 J	0.65 J	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	0.66 J	<3.0	<3.0	<3.0
Magnesium	56,000	48,000	47,000	51,000	48,000	37,000
Magnesium-Dissolved	59,000	50,000	54,000	53,000	50,000	35,000
Manganese	1,800	**1,900**	1,400	1,500	820	1,500
Manganese-Dissolved	1,700	**2,000**	1,500	1,500	890	1,400
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	<10	1.9 B	1.7 J	1.7 J	<10	<10
Molybdenum-Dissolved	<10	2.0 B	1.6 J	<10	1.5 J	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78					GM-79
Top of Screen Depth (ft bls)	20	20	20	20	20	25
Sample Date	09/18/03	04/29/04	07/29/05	07/29/05	12/08/06	09/18/03
Sample ID	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)
Nickel	<25	<25	0.56 J B	0.42 J B	0.23 J	<25
Nickel-Dissolved	<25	<25	3.1 J	0.28 J	0.35 J	<25
Potassium	3,900	3,500	2,900	3,200	2,600	3,200
Potassium-Dissolved	3,900	3,600	3,300	3,200	2,900	3,000
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	<0.20 WN	<0.20	<0.20	<0.20	<0.20	<0.20 WN
Silver-Dissolved	<0.20 WN	<0.20	<0.20	<0.20	<0.20	<0.20 WN
Sodium	30,000	29,000	49,000	53,000	20,000	4,800
Sodium-Dissolved	30,000	30,000	55,000	54,000	22,000	4,400
Thallium	<2.0 WN	<2.0	<2.0	<2.0	<2.0	<2.0 WN
Thallium-Dissolved	<2.0 WN	<2.0	<2.0	<2.0	<2.0	<2.0 WN
Titanium	<50	1.3 B	3.6 J	4.0 J	2.1 J	<50
Titanium-Dissolved	<50	0.65 B	2.7 J	2.5 J	2.8 J	<50
Vanadium	<20	<20	<20	<20	<20	<20
Vanadium-Dissolved	<20	<20	<20	<20	<20	<20
Zinc	<20	38	5.4 J	5.2 J	3.7 J	<20
Zinc-Dissolved	<20	0.83 B	8.3 J	5.9 J	6.7 J B	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-79			GM-82A		GM-84
Top of Screen Depth (ft bls)	25	25	25	82	82	77
Sample Date	04/26/04	07/29/05	12/04/06	06/02/04	06/05/04	08/19/04
Sample ID	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)
Aluminum	200 B	29 J	<200	2,000	1,400	660
Aluminum-Dissolved	<200	<200	<200	<200	<200	<100
Antimony	<50	<50	<50	<50	<50	<25
Antimony-Dissolved	<50	5.4 J	<50	<50	<50	<25
Arsenic	17 B	19 J	18 J	5.2 B	16 B	<10
Arsenic-Dissolved	15 B	19 J	19 J	4.2 B	15 B	2.6 B
Barium	280	260	160 B	250	400	120
Barium-Dissolved	290	270	170 B	230	380	110
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0	<0.50
Cadmium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Cadmium-Dissolved	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Calcium	81,000	18,000	64,000	110,000	130,000	68,000
Calcium-Dissolved	87,000	97,000	70,000	100,000	130,000	65,000
Chromium	0.77 B	<5.0	<5.0	**12**	**17**	4.2
Chromium-Dissolved	<5.0	2.0 J	<5.0	<5.0	1.3 B	<2.5
Cobalt	4.8 B	6.1 J	3.3 J	2.2 B	8.6 B	<5.0
Cobalt-Dissolved	5.0 B	6.7 J	3.5 J	0.77 B	7.3 B	<5.0
Copper	<25	0.39 J	0.71 J B	***160***	**19 B**	6.6 B
Copper-Dissolved	<25	0.54 J	<25	2.7 B	4.7 B	2.7 B
Iron	9,700	2,300	6,800	22,000	21,000	890
Iron-Dissolved	10,000	12,000	7,400	19,000	17,000	<50
Lead	<3.0	<3.0	<3.0	5.3	<3.0	<1.5
Lead-Dissolved	<3.0	0.58 J	<3.0	<3.0	<3.0	<1.5
Magnesium	35,000	40,000	27,000	27,000	120,000	37,000
Magnesium-Dissolved	37,000	43,000	29,000	25,000	110,000	36,000
Manganese	1,000	1,100	840	780	510	170
Manganese-Dissolved	1,100	1,200	930	710	460	150
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	0.081 B
Molybdenum	2.4 B	2.5 J	3.6 J	3.9 B	8.2 B	3.2 B
Molybdenum-Dissolved	2.6 B	2.3 J	4.0 J	3.1 B	5.9 B	3.4 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-79			GM-82A		GM-84
Top of Screen Depth (ft bls)	25	25	25	82	82	77
Sample Date	04/26/04	07/29/05	12/04/06	06/02/04	06/05/04	08/19/04
Sample ID	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)
Nickel	3.5 B	3.1 J B	1.5 J	9.2 B	24 B	3.0 B
Nickel-Dissolved	3.0 B	4.3 J	1.9 J	2.4 B	15 B	<12
Potassium	2,600	2,200	2,300	2,900	7,200	3,000
Potassium-Dissolved	2,800	2,400	2,400	2,200	6,600	2,800
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0	<2.5
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0	<2.5
Silver	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Silver-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Sodium	4,300	4,700	3,700 B	4,200	16,000	6,800
Sodium-Dissolved	4,600	5,100	4,000	4,000	16,000	6,600
Thallium	<2.0	0.32 J	<2.0	<2.0	<2.0	<2.0
Thallium-Dissolved	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Titanium	9.0 B	3.7 J	2.1 J	140	88	29
Titanium-Dissolved	0.79 B	3.2 J	2.3 J	<50	2.3 B	<25
Vanadium	1.0 B	<20	<20	6.0 B	8.3 B	1.9 B
Vanadium-Dissolved	0.58 B	<20	<20	<20	3.2 B	0.59 B
Zinc	1.5 B	6.4 J	5.2 J B	**190**	**170**	21
Zinc-Dissolved	0.98 B	10 J	10 J B	78	**190**	17

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-84 (continued)		GM-87A		GM-87B	GM-118D	
Top of Screen Depth (ft bls)	77	77	32	32	117	54	54
Sample Date	08/01/05	12/12/06	12/05/06	12/05/06	12/05/06	10/21/98	04/29/99
Sample ID	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)	GWGM-87A (12/5/06	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D
Aluminum	480	22 J	18 J B	16 J B	17 J B	<200	<200
Aluminum-Dissolved	16 J	20 J B	<200	<200	16 J B	NA	NA
Antimony	<50	5.0 J	<50	<50	<50	<50	<50
Antimony-Dissolved	<50	<50	<50	<50	<50	NA	NA
Arsenic	4.0 J	4.2 J	20	20	9.2 J	<5	<5
Arsenic-Dissolved	3.7 J	4.1 J	20 J	19 J	8.8 J	NA	NA
Barium	96 J	110	220 B	230 B	48 J B	<200	<200
Barium-Dissolved	95 J	110 B	230 B	210 B	46 J B	NA	NA
Beryllium	<1.0	<1.0	<1.0	<1.0	<1.0	<5	<5
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
Cadmium	0.22 J	<0.50	<0.50	<0.50	<0.50	<0.5	<0.5
Cadmium-Dissolved	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA
Calcium	15,000	71,000	82,000	84,000	31,000	69,000	73,000
Calcium-Dissolved	68,000	71,000 B	85,000	79,000	28,000	NA	NA
Chromium	<5.0	<5.0	<5.0	<5.0	<5.0	<50	<50
Chromium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA
Cobalt	0.23 J	0.10 J	2.5 J	2.5 J	0.11 J	<50	<50
Cobalt-Dissolved	0.22 J	0.24 J	2.5 J	2.4 J	0.13 J	NA	NA
Copper	2.3 J	2.7 J	0.74 J B	0.76 J B	0.58 J B	<25	<25
Copper-Dissolved	2.6 J	0.45 J	0.64 J	<25	<25	NA	NA
Iron	13 J	<100	5,600	5,700	980	<20	<20
Iron-Dissolved	<100	<100	5,800	5,600	860	NA	NA
Lead	0.88 J	<3.0	<3.0	<3.0	<3.0	<3	<3
Lead-Dissolved	0.51 J	<3.0	<3.0	<3.0	<3.0	NA	NA
Magnesium	41,000	38,000	44,000	45,000	21,000	32,000	33,000
Magnesium-Dissolved	38,000	37,000 B	45,000	42,000	18,000	NA	NA
Manganese	100	60	1,500	1,500	240	<5	<5
Manganese-Dissolved	89	67	1,500	1,400	220	NA	NA
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20	<0.2	<0.2
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA
Molybdenum	4.5 J	<10	5.7 J	5.7 J	7.8 J	<100	<100
Molybdenum-Dissolved	2.1 J	<10	6.0 J	5.9 J	7.4 J	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-84 (continued)		GM-87A		GM-87B	GM-118D	
Top of Screen Depth (ft bls)	77	77	32	32	117	54	54
Sample Date	08/01/05	12/12/06	12/05/06	12/05/06	12/05/06	10/21/98	04/29/99
Sample ID	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)	GWGM-87A (12/5/06	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D
Nickel	1.3 J B	1.6 J	1.2 J	1.2 J	0.17 J	<50	<50
Nickel-Dissolved	0.66 J	0.87 J B	1.8 J	1.6 J	<25	NA	NA
Potassium	2,000	2,500	2,800	2,800	3,200	1,800	1,800
Potassium-Dissolved	2,200	2,600	2,700	2,500	2,800	NA	NA
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA
Silver	<0.20	<0.20	<0.20	<0.20	<0.20	<0.5	<0.5
Silver-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20	NA	NA
Sodium	6,800	9,300	7,900 B	8,000 B	3,400 B	8,200	10,000
Sodium-Dissolved	7,900	9,000	7,900	7,400	2,900	NA	NA
Thallium	<2.0	<2.0	<2.0	<2.0	<2.0	<2	<2
Thallium-Dissolved	<2.0	<2.0	<2.0	<2.0	<2.0	NA	NA
Titanium	2.2 J	<50	2.7 J	2.9 J	2.4 J	<50	<50
Titanium-Dissolved	1.0 J	1.1 J	2.6 J	2.5 J	2.0 J	NA	NA
Vanadium	2.9 J	<20	<20	<20	<20	<20	<20
Vanadium-Dissolved	<20	<20	<20	<20	<20	NA	NA
Zinc	6.2 J	37	6.1 J B	6.9 J B	4.6 J B	<20	<20
Zinc-Dissolved	<20	11 J	9.4 J B	5.1 J B	4.1 J B	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-111[1]	GMSB-112[1]			GMSB-113[1]	
Top of Screen Depth (ft bls	--	--	--	--	--	--
Sample Date	08/19/03	09/03/03	09/03/03	09/03/03	09/05/03	09/05/03
Sample ID	GBGWGMSB-111/26	GBGWGMSB-112/134	GBGWGMSB-112/134-DI	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199
Aluminum	<200	<200	NA	<200	<200	<200
Aluminum-Dissolved	<200	<200	NA	<200	<200	<200
Antimony	<50	<50	NA	<50	<50	<50
Antimony-Dissolved	<50	<50	NA	<50	<50	<50
Arsenic	<20	<20	NA	58	39	60
Arsenic-Dissolved	<20	<20	NA	60	39	56
Barium	130	730	NA	<100	610	<100
Barium-Dissolved	130	720	NA	<100	620	<100
Beryllium	<1.0	<1.0	NA	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	NA	<1.0	<1.0	<1.0
Cadmium	<0.50 WN	<1.0 WN	NA	<0.50 WN	<0.50 WN	<0.50 WN
Cadmium-Dissolved	<0.50 WN	<1.0 N	NA	<0.50 WN	<0.50 WN	<0.50 WN
Calcium	79,000	160,000	NA	35,000	140,000	37,000
Calcium-Dissolved	83,000	160,000	NA	35,000	140,000	34,000
Chromium	<5.0	<5.0	NA	<5.0	<5	<5.0
Chromium-Dissolved	<5.0	<5.0	NA	<5.0	<5.0	<5.0
Cobalt	<10	<10 B	NA	<10	<10	<10
Cobalt-Dissolved	<10	<10	NA	<10	<10	<10
Copper	<25	<25 B	NA	<25	<20	<25
Copper-Dissolved	<25	<25	NA	<25	<20	<25
Iron	310	25,000	NA	540	22,000	970
Iron-Dissolved	<100	25,000	NA	260	22,000	350
Lead	<3.0	<3.0	NA	<3.0	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	NA	<3.0	<3.0	<3.0
Magnesium	33,000	310,000	NA	24,000	240,000	29,000
Magnesium-Dissolved	34,000	310,000	NA	24,000	240,000	27,000
Manganese	280	65	NA	43	48	54
Manganese-Dissolved	290	60	NA	37	45	38
Mercury	<0.20	<0.20	NA	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	NA	<0.20	<0.20	<0.20
Molybdenum	<10	<10	NA	<10	<10	<10
Molybdenum-Dissolved	<10	<10	NA	<10	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-111[1]	GMSB-112[1]			GMSB-113[1]	
Top of Screen Depth (ft bls	--	--	--	--	--	--
Sample Date	08/19/03	09/03/03	09/03/03	09/03/03	09/05/03	09/05/03
Sample ID	GBGWGMSB-111/26	GBGWGMSB-112/134	GBGWGMSB-112/134-DI	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199
Nickel	<25	<25	NA	<25	<10	<25
Nickel-Dissolved	<25	<25	NA	<25	<25	<25
Potassium	4,100	8,200	NA	2,500	6,300	2,800
Potassium-Dissolved	4,400	8,200	NA	2,500	6,400	2,500
Selenium	<5.0	<5.0	NA	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	NA	<5.0	<5.0	<5.0
Silver	<0.40 WN	<0.20 WN	NA	<0.20 WN	<0.20 WN	<0.20 WN
Silver-Dissolved	<0.20 WN	<0.20 WN	NA	<0.20 WN	<0.20 WN	<0.20 WN
Sodium	14,000	NA	49,000	4,100	39,000	3,700
Sodium-Dissolved	15,000	49,000	49,000	4,300	40,000	3,500
Thallium	<2.0 W	<2.0 WN	NA	<2.0	<2.0	<2.0 WN
Thallium-Dissolved	<2.0 W	<2.0 WN	NA	<2.0	0.50 B	<2.0 WN
Titanium	<50	<50	NA	<50	<10	<50
Titanium-Dissolved	<50	<50	NA	<50	<10	<50
Vanadium	<20	<20	NA	<20	<10	<20
Vanadium-Dissolved	<20	<20	NA	<20	<10	<20
Zinc	<20	<20	NA	<20	<20	<20
Zinc-Dissolved	<20	<20	NA	<20	<20	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-113[1] (continued)	GMSB-116[1]		GMSB-117[1]	
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/04/03	08/12/03	08/11/03	08/14/03	08/15/03
Sample ID	GBGWGMSB-113/27	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154
Aluminum	<200	<200	<200	410	33 B
Aluminum-Dissolved	<200	<200	<200	<200	<200
Antimony	<50	<50	<50	<50	<50
Antimony-Dissolved	<50	<50	<50	<50	<50
Arsenic	<20	<20	<20	15 B	27
Arsenic-Dissolved	<20	<20	<20	15 B	25
Barium	210	400	100	120	400
Barium-Dissolved	210	390	100	110	400
Beryllium	<1.0	<1.0	<1.0	<1.0	0.054 B
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50 WN	<0.50	<0.50	<0.50 WN	<0.50 WN
Cadmium-Dissolved	<0.50 WN	<0.50	<0.50	<0.50 WN	<0.50 WN
Calcium	100,000	120,000	56,000	100,000	110,000
Calcium-Dissolved	100,000	120,000	54,000	99,000	110,000
Chromium	<5.0	<5.0	<5.0	2.3 B	1.0 B
Chromium-Dissolved	<5.0	<5.0	<5.0	0.69 B	0.56 B
Cobalt	<10	<10	<10	4.3 B	3.3 B
Cobalt-Dissolved	<10	<10	<10	3.8 B	3.3 B
Copper	<25	<25	<25	3.3 B	1.9 B
Copper-Dissolved	<25	<25	<25	1.1 B	2.1 B
Iron	8,600	9,700	2,300	11,000	17,000
Iron-Dissolved	8,300	9,300	2,000	9,600	17,000
Lead	<3.0	<3.0	<3.0	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	45,000	87,000	24,000	100,000	160,000
Magnesium-Dissolved	44,000	85,000	23,000	97,000	160,000
Manganese	1,300	120	920	57	56
Manganese-Dissolved	1,300	110	880	40	55
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	<10	<10	<10	2.8 B	3.5 B
Molybdenum-Dissolved	<10	<10	<10	2.9 B	2.5 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-113[1] (continued)	GMSB-116[1]		GMSB-117[1]	
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/04/03	08/12/03	08/11/03	08/14/03	08/15/03
Sample ID	GBGWGMSB-113/27	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154
Nickel	<25	<25	<25	8.4 B	8.4 B
Nickel-Dissolved	<25	<25	<25	7.1 B	7.8 B
Potassium	3,800	4,400	2,200	3,600	4,600
Potassium-Dissolved	3,800	4,300	2,200	3,500	4,500
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	<5.0	2.3 B	<5.0
Silver	<0.20 WN	<0.20 W	<0.20 W	<0.20 WN	<0.20 WN
Silver-Dissolved	<0.20 WN	<0.20 W	<0.20 W	<0.20 WN	<0.20 WN
Sodium	20,000	11,000	3,100	17,000	30,000
Sodium-Dissolved	20,000	10,000	3,000	16,000	30,000
Thallium	<2.0	<2.0 W	<2.0 W	<2.0 W	<2.0 W
Thallium-Dissolved	<2.0	<2.0 W	<2.0 W	<2.0 W	<2.0 W
Titanium	<50	<50	<50	19 B	2.1 B
Titanium-Dissolved	<50	<50	<50	0.70 B	1.2 B
Vanadium	<20	<20	<20	2.0 B	1.3 B
Vanadium-Dissolved	<20	<20	<20	<20	1.2 B
Zinc	<20	<20	35	4.3 B	2.4 B
Zinc-Dissolved	<20	<20	30	1.9 B	2.9 B

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-118[1]	GMSB-119[1]		GMSB-122[1]	GMSB-123[1]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/16/03	08/18/03	08/17/03	09/08/03	09/09/03
Sample ID	GBGWGMSB-118/25	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150
Aluminum	310	720	<200	640	1800
Aluminum-Dissolved	<200	<200	330	<200	<200
Antimony	<50	<50	<50	<50	<50
Antimony-Dissolved	<50	<50	<50	<50	<50
Arsenic	35	49	2.1 B	26	56
Arsenic-Dissolved	39	49	<20	24	55
Barium	800	61 B	45 B	890	410
Barium-Dissolved	830	58 B	47 B	840	400
Beryllium	0.056 B	<1.0	<1.0	<1.0	<1.0
Beryllium-Dissolved	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	<0.50 WN	<0.50 WN	<0.50 WN	<0.50 WN	<0.50 WN
Cadmium-Dissolved	<0.50 WN	<0.50 WN	<0.50 WN	<0.50 WN	<0.50 WN
Calcium	140,000	77,000	68,000	180,000	130,000
Calcium-Dissolved	140,000	77,000	69,000	180,000	120,000
Chromium	3.6 B	3.9 B	<5.0	7.7	6
Chromium-Dissolved	2.7 B	<5.0	3.8 B	<5.0	<5.0
Cobalt	6.5 B	1.0 B	1.1 B	<10	<10
Cobalt-Dissolved	6.6 B	<10	1.1 B	<10	<10
Copper	4.4 B	4.0 B	1.5 B	<25	<25
Copper-Dissolved	1.6 B	<25	2.7 B	<25	<25
Iron	32,000	6,000	1,200	29,000	22,000
Iron-Dissolved	32,000	4,400	1,900	25,000	17,000
Lead	<3.0	<3.0	<3.0	<3.0	<3.0
Lead-Dissolved	<3.0	<3.0	<3.0	<3.0	<3.0
Magnesium	170,000	54,000	36,000	380,000	190,000
Magnesium-Dissolved	170,000	54,000	37,000	370,000	190,000
Manganese	350	370	390	96	150
Manganese-Dissolved	340	350	400	73	57
Mercury	<0.20	<0.20	<0.20	<0.20	<0.20
Mercury-Dissolved	<0.20	<0.20	<0.20	<0.20	<0.20
Molybdenum	2.5 B	2.2 B	30	<10	<10
Molybdenum-Dissolved	2.4 B	2.3 B	31	<10	<10

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-118[1]	GMSB-119[1]		GMSB-122[1]	GMSB-123[1]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/16/03	08/18/03	08/17/03	09/08/03	09/09/03
Sample ID	GBGWGMSB-118/25	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150
Nickel	6.9 B	2.9 B	1.2 B	<25	<25
Nickel-Dissolved	6.3 B	<25	3.6 B	<25	<25
Potassium	4,900	2,200	4,900	9,400	5,900
Potassium-Dissolved	5,000	2,100	5,100	9,200	5,700
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0
Selenium-Dissolved	<5.0	<5.0	<5.0	<5.0	<5.0
Silver	<0.20 WN	<0.20 WN	<0.20 WN	<0.20 WN	<0.20 WN
Silver-Dissolved	<0.20 WN	<0.20 WN	<0.20 WN	<0.20 WN	<0.20 WN
Sodium	19,000	13,000	17,000	54,000	34,000
Sodium-Dissolved	20,000	13,000	17,000	53,000	34,000
Thallium	0.45 BW	<2.0 W	<2.0 W	0.60 BWN	0.45 BWN
Thallium-Dissolved	0.55 BW	<2.0 W	<2.0 W	<2.0 WN	<2.0 WN
Titanium	20 B	26 B	<50	79	<50
Titanium-Dissolved	7.1 B	<50	18 B	51	<50
Vanadium	5.4 B	1.5 B	0.69 B	<20	<20
Vanadium-Dissolved	4.4 B	<20	1.4 B	<20	<20
Zinc	5.6 B	7.3 B	1.9 B	<20	<20
Zinc-Dissolved	2.9 B	3.9 B	3.2 B	<20	<20

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MPMW-4	MW-1B	MW-2B	MW-5		MW-8		
Top of Screen Depth (ft bls)	--	86	102	83	83	133	133	133
Sample Date	02/26/02	06/27/97	06/28/97	10/22/98	04/30/99	06/29/97	06/29/97	10/24/98
Sample ID	GWMPMW-4 (2/26/02)	GWMW-1B	GWMW-2B	GWMW-5	GWMW-5	GWGM-99	GWMW-8	GWMW-8
Aluminum	2100 E	NA	NA	<200	<200	NA	NA	<200
Aluminum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	<50	NA	NA	<50	<50	NA	NA	<50
Antimony-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	3.5 B	NA	NA	7.1	5.9	NA	NA	16
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Barium	42 B	NA	NA	<200	<200	NA	NA	270 J
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	0.11 B	NA	NA	<5	<5	NA	NA	<5
Beryllium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	<0.50	NA	NA	<0.5	<0.5	NA	NA	<0.5
Cadmium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	36,000	83,000	66,200	28,000	31,000	82,500 J	84,500 J	46,000
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	11	NA	NA	<50	<50	NA	NA	<50 J
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	1.4 B	NA	NA	<50	<50	NA	NA	<50 J
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Copper	6.3 B	NA	NA	R	<25	NA	NA	<25 J
Copper-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Iron	2,700	9,820	16,400	47	27	24,600 J	24,500 J	7,300 J
Iron-Dissolved	NA	6,250	16,100	NA	NA	2,800 J	3,640 J	NA
Lead	1.4 B	NA	NA	<3	<3	NA	NA	<3
Lead-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	19,000	27,000	27,000	22,000	24,000	169,000 J	169,000 J	150,000 J
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	74	354	1,310	7 J	8.3	330 J	341 J	28
Manganese-Dissolved	NA	344	1,300	NA	NA	38.1 J	36.6 J	NA
Mercury	<0.20	NA	NA	<0.2	<0.2	NA	NA	<0.2
Mercury-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	1.9 B	NA	NA	<100 J	<100	NA	NA	<100 J
Molybdenum-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MPMW-4	MW-1B	MW-2B	MW-5		MW-8		
Top of Screen Depth (ft bls)	--	86	102	83	83	133	133	133
Sample Date	02/26/02	06/27/97	06/28/97	10/22/98	04/30/99	06/29/97	06/29/97	10/24/98
Sample ID	GWMPMW-4 (2/26/02)	GWMW-1B	GWMW-2B	GWMW-5	GWMW-5	GWGM-99	GWMW-8	GWMW-8
Nickel	8.6 B	NA	NA	<50	<50	NA	NA	<50 J
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	2,300	<5,000	<5,000	1,900	2,100	6,330 J	6,400 J	4,900
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	<5.0	NA	NA	<5	<5	NA	NA	<5
Selenium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Silver	<0.20	NA	NA	<0.5	<0.5	NA	NA	<0.5
Silver-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	4,000	8,930	9,880	3,600	4,100	19,700 J	19,200 J	18,000
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	<2.0	NA	NA	<2	<2	NA	NA	<2
Thallium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	84 E	NA	NA	<50	<50	NA	NA	<50 J
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	7.0 B	NA	NA	<20	<20	NA	NA	<20 J
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	13 B	NA	NA	***450 J***	<20	NA	NA	<20 J
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-8 (continued)		MW-9A	MW-10	UG-2			UG-4		
Top of Screen Depth (ft bls)	133	133	57	95	48	48	48	103	103	103
Sample Date	05/03/99	05/12/04	07/02/97	06/30/97	07/01/97	10/27/98	05/03/99	10/13/97	10/13/97	10/23/98
Sample ID	GWMW-8	GWMW-8 (5/12/04)	GWMW-9A	GWMW-10	GWUG-2	GWUG-2	GWUG-2	GM-79	UG-4	GWUG-4
Aluminum	<200	430	NA	NA	NA	<200	<200	NA	NA	<200
Aluminum-Dissolved	NA	<200	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	<50	<50	NA	NA	NA	<50	<50	NA	NA	<50
Antimony-Dissolved	NA	<50	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	21	10 B	NA	NA	NA	<5	<5	NA	NA	<5
Arsenic-Dissolved	NA	12 B	NA	NA	NA	NA	NA	NA	NA	NA
Barium	300	260	NA	NA	NA	<200	<200	NA	NA	<200 J
Barium-Dissolved	NA	240	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	<5	<1.0	NA	NA	NA	<5	<5	NA	NA	<5
Beryllium-Dissolved	NA	<1.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	***20***	<0.50 *F5	NA	NA	NA	<0.5	<0.5	NA	NA	<0.5
Cadmium-Dissolved	NA	<0.50 *F5	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	55,000 J	46,000	49,500	80,400	83,200	79,000	80,000	65,200	64,700	55,000
Calcium-Dissolved	NA	44,000	NA	NA	NA	NA	NA	63,000	64,200	NA
Chromium	<50	5.4	NA	NA	NA	<50	<50	NA	NA	<50 J
Chromium-Dissolved	NA	1.2 B	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	<50	<10	NA	NA	NA	<50	<50	NA	NA	<50 J
Cobalt-Dissolved	NA	<10	NA	NA	NA	NA	NA	NA	NA	NA
Copper	<25	5.5 B	NA	NA	NA	<25	<25	NA	NA	<25 J
Copper-Dissolved	NA	<25	NA	NA	NA	NA	NA	NA	NA	NA
Iron	8,700	14,000	1,140	1,410 L	<100	<20	<34	4,630	5,040	1,600 J
Iron-Dissolved	NA	5,300	890	154	<100	NA	NA	1,780	1,930	NA
Lead	***21***	1.9 B	NA	NA	NA	<3	<3	NA	NA	<3
Lead-Dissolved	NA	<3.0	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	150,000	140,000	13,900	41,100	38,200	39,000	41,000	30,800	31,000	27,000 J
Magnesium-Dissolved	NA	140,000	NA	NA	NA	NA	NA	29,800	30,300	NA
Manganese	32 J	110	547	93.6	<15	<5	<5	252	254	180
Manganese-Dissolved	NA	39	532	87.4	<15	NA	NA	195	203	NA
Mercury	<0.2	<0.20	NA	NA	NA	<0.2	<0.2	NA	NA	<0.2
Mercury-Dissolved	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Molybdenum	<100	0.95 B	NA	NA	NA	<100	<100	NA	NA	<100 J
Molybdenum-Dissolved	NA	1.5 B	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-8 (continued)		MW-9A	MW-10	UG-2			UG-4		
Top of Screen Depth (ft bls)	133	133	57	95	48	48	48	103	103	103
Sample Date	05/03/99	05/12/04	07/02/97	06/30/97	07/01/97	10/27/98	05/03/99	10/13/97	10/13/97	10/23/98
Sample ID	GWMW-8	GWMW-8 (5/12/04)	GWMW-9A	GWMW-10	GWUG-2	GWUG-2	GWUG-2	GM-79	UG-4	GWUG-4
Nickel	<50	4.6 B	NA	NA	NA	<50	<50	NA	NA	<50 J
Nickel-Dissolved	NA	2.6 B	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	4,800	5,600	<5,000	<5,000	<5,000	1,700	2,000	<5,000	<5,000	2,300
Potassium-Dissolved	NA	5,500	NA	NA	NA	NA	NA	<5,000	<5,000	NA
Selenium	**19**	<5.0	NA	NA	NA	<5	<5	NA	NA	<5
Selenium-Dissolved	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA
Silver	<0.5	<0.20	NA	NA	NA	**0.88**	<0.5	NA	NA	<0.5
Silver-Dissolved	NA	<0.20	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	16,000	16,000	7,590	17,500	12,000	9,300	12,000	16,500	15,900	27,000
Sodium-Dissolved	NA	16,000	NA	NA	NA	NA	NA	15,400	15,500	NA
Thallium	**22**	0.45 B*F5	NA	NA	NA	<2	<2	NA	NA	<2
Thallium-Dissolved	NA	0.60 B*F5	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	<50	17 B	NA	NA	NA	<50	<50	NA	NA	<50 J
Titanium-Dissolved	NA	1.9 B	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	<20	10 B	NA	NA	NA	<20	<20	NA	NA	<20 J
Vanadium-Dissolved	NA	7.7 B	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	<20	14 B	NA	NA	NA	<20	<20	NA	NA	<20 J
Zinc-Dissolved	NA	3.9 B	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4 (continued)	UG-6	Residental	Residential	Residential	Final	Final	Groundwater
Top of Screen Depth (ft bls)	103	236	Direct	Indoor	Drinking	Acute	Chronic	Surface Water
Sample Date	05/02/99	10/21/97	Contact	Air	Water	Value	Value	Interface
Sample ID	GWUG-4	UG-6	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria
Aluminum	<200	NA	64,000,000 (B)	(B) NLV	50 (B) V	--	--	--
Aluminum-Dissolved	NA	NA	64,000,000 (B)	(B) NLV	50 (B) V	--	--	--
Antimony	<50	NA	68,000	NLV	6A	2,300	240	130 X
Antimony-Dissolved	NA	NA	68,000	NLV	6A	2,300	240	130 X
Arsenic	45	NA	4,300	NLV	10A	680	150	150 X
Arsenic-Dissolved	NA	NA	4,300	NLV	10A	680	150	150 X
Barium	<200	NA	14,000,000 (B)	(B) NLV	2,000 (B) A	2300 H*92	400 H*92	400 (B) G,X
Barium-Dissolved	NA	NA	14,000,000 (B)	(B) NLV	2,000 (B) A	2300 H*92	400 H*92	400 (B) G,X
Beryllium	<5	NA	290,000	NLV	4A	35 H*92	1.9 H*92	1.9 G
Beryllium-Dissolved	NA	NA	290,000	NLV	4A	35 H*92	1.9 H*92	1.9 G
Cadmium	***41***	NA	190,000 (B)	(B) NLV	5 (B) A	7.8 H*92	2.1 H*92	2.1 (B) G,X
Cadmium-Dissolved	NA	NA	190,000 (B)	(B) NLV	5 (B) A	7.8 H*92	2.1 H*92	2.1 (B) G,X
Calcium	51,000 J	75,100	--	--	--	--	--	--
Calcium-Dissolved	NA	64,900	--	--	--	--	--	--
Chromium	<50	NA	460,000	NLV	100 A	32 Dissolved	11 Dissolved	11
Chromium-Dissolved	NA	NA	460,000	NLV	100 A	32 Dissolved	11 Dissolved	11
Cobalt	<50	NA	2,400,000	NLV	40	740	100	100
Cobalt-Dissolved	NA	NA	2,400,000	NLV	40	740	100	100
Copper	<25	NA	7,400,000 (B)	(B) NLV	1,000 (B) E	25 H*92	8.3 H*92	8.3 (B) G
Copper-Dissolved	NA	NA	7,400,000 (B)	(B) NLV	1,000 (B) E	25 H*92	8.3 H*92	8.3 (B) G
Iron	1,400	9,870	58,000,000 (B)	(B) NLV	300 (B) E	--	--	--
Iron-Dissolved	NA	334	58,000,000 (B)	(B) NLV	300 (B) E	--	--	--
Lead	***47***	NA	(B) ID	(B) NLV	4 (B) L	170 H*92	9.4 H*92	9.4 (B) G,X
Lead-Dissolved	NA	NA	(B) ID	(B) NLV	4 (B) L	170 H*92	9.4 H*92	9.4 (B) G,X
Magnesium	26,000	36,000	1,000,000,000 (B) D	(B) NLV	400,000 (B)	--	--	--
Magnesium-Dissolved	NA	30,200	1,000,000,000 (B) D	(B) NLV	400,000 (B)	--	--	--
Manganese	160 J	488	9,100,000 (B)	(B) NLV	50 (B) E	7,700 H*92	1,800 H*92	1,800 (B) G,X
Manganese-Dissolved	NA	313	9,100,000 (B)	(B) NLV	50 (B) E	7,700 H*92	1,800 H*92	1,800 (B) G,X
Mercury	<0.2	NA	56 B,Z (total),S	56 B,Z (total),S	2 B,Z (total),A	2.8 *D	0.77 *D	0.0013 B,Z (total)
Mercury-Dissolved	NA	NA	--	--	--	2.8 *D	0.77 *D	--
Molybdenum	<100	NA	970,000 (B)	(B) NLV	73 (B)	58,000	3,200	800 (B) X
Molybdenum-Dissolved	NA	NA	970,000 (B)	(B) NLV	73 (B)	58,000	3,200	800 (B) X

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4 (continued)	UG-6	Residental	Residential	Residential	Final	Final	Groundwater
Top of Screen Depth (ft bls)	103	236	Direct	Indoor	Drinking	Acute	Chronic	Surface Water
Sample Date	05/02/99	10/21/97	Contact	Air	Water	Value	Value	Interface
Sample ID	GWUG-4	UG-6	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria
Nickel	<50	NA	74,000,000 (B)	(B) NLV	100 (B) A	870 H*92	48 H*92	48 (B) G
Nickel-Dissolved	NA	NA	74,000,000 (B)	(B) NLV	100 (B) A	870 H*92	48 H*92	48 (B) G
Potassium	1,300	<5,000	--	--	--	--	--	--
Potassium-Dissolved	NA	<5,000	--	--	--	--	--	--
Selenium	41	NA	970,000 (B)	(B) NLV	50 (B) A	R	R	5 (B)
Selenium-Dissolved	NA	NA	970,000 (B)	(B) NLV	50 (B) A	R	R	5 (B)
Silver	<0.5	NA	1,500,000 (B)	(B) NLV	34 (B)	1.1	0.06	0.2 (B) M
Silver-Dissolved	NA	NA	1,500,000 (B)	(B) NLV	34 (B)	1.1	0.06	0.2 (B) M
Sodium	20,000	10,300	1,000,000,000 D	NLV	120,000	--	--	--
Sodium-Dissolved	NA	8,890	1,000,000,000 D	NLV	120,000	--	--	--
Thallium	47	NA	13,000 (B)	(B) NLV	2 (B) A	94	7.2	3.7 (B) X
Thallium-Dissolved	NA	NA	13,000 (B)	(B) NLV	2 (B) A	94	7.2	3.7 (B) X
Titanium	<50	NA	--	--	--	ID	ID	--
Titanium-Dissolved	NA	NA	--	--	--	ID	ID	--
Vanadium	<20	NA	970,000	NLV	4.5	220	12	12
Vanadium-Dissolved	NA	NA	970,000	NLV	4.5	220	12	12
Zinc	<20	NA	110,000,000 (B)	(B) NLV	2,400 (B)	220 H*92	110 H*92	110 (B) G
Zinc-Dissolved	NA	NA	110,000,000 (B)	(B) NLV	2,400 (B)	220 H*92	110 H*92	110 (B) G

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Table 4-7. Summary of Metals Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results in micrograms per liter (µg/L).

<	Less than detection limit.
ft bls	Feet below land surface.
Italics	Indicates a value above the Final Acute Value Criteria (Michigan Act 41, Part 4, Rule 57, December 11, 2006).
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 41, Part 4, Rule 57, December 11, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
--	Not applicable.
(1)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
*	Duplicate analysis was not within control limits.
*F5	Post-digestion spike recovery for furnace AA analysis exceeded control limits and sample absorbance or concentration was less than 50% of spike
B	Constituent was also detected in laboratory blank.
*D	Value is expressed as dissolved.
D	Result was obtained from analysis of a dilution.
E	Analyte was detected at a concentration greater than the calibration range, and is therefore estimated.
J	Estimated result.
L	Serial dilution indicates that interference is present.
M	Matrix interference reported by laboratory.
MBD	This analyte is present in the associated method blank at an amount that is less than two times the reporting limit.
N	Presumptive evidence of compound was identified (TICs only).
NA	Not analyzed.
R	Rejected result.
W	Post-digestion spike for furnace A-A analysis is out of control limits while sample absorbance is less than 50% of spike absorbance.
Z	Data for mercuric chloride serves as the basis for drinking water, groundwater contact, soil direct contact and the groundwater protection criteria.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

A	State of Michigan Drinking Water Standard.
B	Background may be substituted if higher than the calculated cleanup criteria.
E	Criterion is the aesthetic drinking water value.
G	GSI value is pH or water hardness dependent.
H*92	Criteria based on water hardness of 92.
ID	Inadequate data to develop criterion.
M	Calculated criterion is below the analytical method detection limit (MDL).
NLV	Chemical is not likely to volatilize under most soil conditions.
S	Criterion defaults to the chemical-specific water solubility limit.
Total	Criterion established for total metal concentration only.
X	The GSI criterion shown is not protective for surface water that is used as a drinking water source.
Z	Data for mercuric chloride serves as the basis for Drinking Water Groundwater Contact Soil Direct Contact, and the Groundwater Protection Criteria.

Table 4-8. Summary of Constituents Detected in Groundwater, Ford-Kingsford Products Facility, Kingsford, Michigan.

Compounds	
Volatile Organic Compounds	**Semi-Volatile Organic Compounds (continued)**
1,1-Dichloroethane	2-Nitrophenol
1,1-Dichloroethene	3,4-Dimethylphenol
1,2,4-Trimethylbenzene	3-Methylphenol
1,2-Dichloroethene (total)	3-Methylphenol/4-Methylphenol(m&p-cresol)
1,3,5-Trimethylbenzene	4-Chloro-3-methylphenol
1,3-Dichlorobenzene	4-Methylphenol
2-Butanone (MEK)	Anthracene
2-Hexanone	Benzo(a)anthracene
4-Methyl-2-pentanone (MIBK)	Benzo(a)pyrene
Acetone	Benzo(b)fluoranthene
Acrylonitrile	Benzo(g,h,i)perylene
Benzene	Benzo(k)fluoranthene
Bromoform	bis(2-Ethylhexyl)phthalate
Bromomethane	Butylbenzylphthalate
Carbon disulfide	Carbazole
Chlorobenzene	Chrysene
Chloroethane	Dibenzo(a,h)anthracene
Chloroform	Diethylphthalate
Chloromethane	Dimethylphthalate
cis-1,2-Dichloroethene	Di-n-butylphthalate
Diethylether	Di-n-octylphthalate
Ethylbenzene	Fluoranthene
Furan	Hexachlorobenzene
Isopropylbenzene	Indeno(1,2,3-c,d)pyrene
Methyl iodide	Naphthalene
Methyl(tert)butyl ether	Phenanthrene
Methylene chloride	Phenol
n-Propylbenzene	Pyrene
Propionitrile	
Styrene	**Metals**
Tetrachloroethene	Aluminum
Tetrahydrofuran	Antimony
Toluene	Arsenic
trans-1,2-Dichloroethene	Barium
Trichloroethene	Beryllium
Vinyl chloride	Cadmium
Xylene, o	Calcium
Xylenes (total)	Chromium
Xylenes, m+p	Cobalt
	Copper
Semi-Volatile Organic Compounds	Iron
2,3-Dimethylphenol	Lead
2,4-Dimethylphenol	Magnesium
2,4-Dimethylphenol/2,5-Dimethylphenol	Manganese
2,5-Dimethylphenol	Mercury
2,6-Dimethylphenol	Molybdenum
2-Methylnaphthalene	Nickel
2-Methylphenol	Potassium

Table 4-8. Summary of Constituents Detected in Groundwater, Ford-Kingsford Products Facility, Kingsford, Michigan.

Compounds	
Metals (continued)	**Aldehydes (continued)**
Selenium	Hexanal
Silver	m-Tolualdehyde
Sodium	Nonanal
Thallium	Octanal
Titanium	Paraldehyde
Vanadium	Pentanal
Zinc	Propanal
Inorganic	**Organic Acids**
Alkalinity	Acetic Acid/Acetate
Ammonia	Ethylacetate
Bicarbonate	
Chloride	**Miscellaneous**
Chlorides Soluble	Biochemical Oxygen Demand
Nitrogen, (Ammonia)	Chemical Oxygen Demand
Nitrogen, Nitrate	Dissolved Organic Carbon
Nitrogen, Nitrite	Hardness as $CaCO_3$
Nitrogen, Nitrite and Nitrate	Methane
Ortho-Phosphate	Suspended Solids
Phosphate	Total Dissolved Solids
Phosphorus	Total Organic Carbon
Silica	
Silica, Dissolved	
Sulfate	
Sulfate Soluble	
Sulfide	
Alcohols	
1,4-Dioxane	
2-Pentanone	
Acetonitrile	
Ethanol	
Ethylene glycol	
Isobutanol	
Isopropanol	
Methanol	
n-Butanol	
n-Propanol	
Tert-Butyl Alcohol	
Aldehydes	
Acetaldehyde	
Butanal	
Crotonaldehyde	
Cyclohexanone	
Decanal	
Formaldehyde	
Heptanal	

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A	BR-5B		BR-6	CW-1			GM-1		
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130	220	220	220
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99	06/24/97	10/09/97	10/09/97
Sample ID	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1	GWGM-1	GM-1	GM-1
1,1-Dichloroethane	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	0.098 J	0.10 J	0.10 J
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
1,2-Dichloroethene (total)	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
1,3-Dichlorobenzene	<2.5	<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1
2-Butanone (MEK)	<25	<10	<10	<10	<10	<10	<10	<10	<10 J	9.5 J	12	12
2-Hexanone	<25	<10	<10	<10	<10	<10	<10	<10	<10 J	11	14	14
4-Methyl-2-pentanone (MIBK)	<25	<10	<10	<10	<10	<10	<10	<10	<10 J	<10	<10	<10
Acetone	<25	<10	<10	<10	<10	<10	<10	<10	R	12	<10	<10
Acrylonitrile	NA	NA	NA	NA	NA	NA	NA	<25	R	NA	NA	NA
Benzene	65	<1	0.56 J	2.2	2.2	0.64 J	6	6	6.2	8.8	10	10
Bromoform	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	2.0 J	0.62 J	0.72 J	<1	<1	<1	<1	<1	<1	0.42 J	28	28
Chlorobenzene	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	1.9 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<2.5	<1	0.22 J	<1	<1	<1	<1	<1	<1	1	1.2	1.2
Diethylether	NA	NA	NA	NA	NA	NA	NA	14	15	NA	NA	NA
Ethylbenzene	<2.5	<1	0.41 J	0.48 J	0.52 J	<1	0.55 J	<1	<1	1.1	1.3	1.3
Furan	NA	NA	NA	NA	NA	NA	NA	<5	<5	NA	NA	NA
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
Methyl iodide	NA	NA	NA	NA	NA	NA	NA	<5	<5	NA	NA	NA
Methyl(tert)butyl ether	NA	NA	NA	NA	NA	NA	NA	<50	<50	NA	NA	NA
Methylene chloride	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
Propionitrile	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	<5	R	NA	NA	NA
Toluene	<2.5	0.63 J	1.6	0.62 J	0.63 J	<1	0.65 J	1	<1	11	12	12
trans-1,2-Dichloroethene	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	0.73 J	0.89 J	0.89 J
Trichloroethene	<2.5	<1	0.26 J	<1	<1	<1	<1	<1	<1	5	6.6	6.6
Vinyl chloride	<2.5	<1	<1	<1	<1	<1	<1	<1	<1	0.070 J	0.094 J	0.094 J
Xylene, o	NA	NA	NA	NA	NA	NA	NA	<1	<1	NA	NA	NA
Xylenes (total)	2.0 J	<1	1.3	1.4	1.5	<1	0.85 J	<3	<3	5.6	6.6	6.6
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	<2	<2	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1 (continued)			GM-2A		GM-2B					
Top of Screen Depth (ft bls)	220	220	220	40	40	271	271	271	271	271	271
Sample Date	10/07/98	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97	12/11/97	11/22/98	04/16/99	05/25/04
Sample ID	GWGM-1	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B	GM-2B	GWGM-2B	GWGM-2B	GWGM-2B(5/25/04)
1,1-Dichloroethane	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
1,1-Dichloroethene	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
1,2,4-Trimethylbenzene	<1	1	1	NA	NA	NA	NA	NA	<12	<25	5.2
1,2-Dichloroethene (total)	2.6	5.3	7.7	NA	NA	NA	NA	NA	<12	<25	<10
1,3,5-Trimethylbenzene	<1	<1	0.30 J	NA	NA	NA	NA	NA	<12	<25 J	<5.0
1,3-Dichlorobenzene	<5	<5	<1.0	<1	<1	<12	<10	<4.2 J	<62	<120	<5.0
2-Butanone (MEK)	<10	11	5.9 J	<10	<10	940	1,100	940 J	950	800	970
2-Hexanone	14	13	7.2 J	<10	<10	180	170	<42 J	140	<250	140 J
4-Methyl-2-pentanone (MIBK)	<10	<10	1.2 J	<10	<10	<120	<100	<42 J	<120	<250	19 J
Acetone	<10	R	<100	28	<10	1,000	1,200	750 J	820	780 J	1,200
Acrylonitrile	<25	<25 J	<25	NA	NA	NA	NA	NA	<25	<25 J	<120
Benzene	11	11	14	<1	<1	55	43	48 J	47	46	24
Bromoform	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Bromomethane	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Carbon disulfide	2.8	<1	<5.0	<1	0.91 J	<12	6.8 J	12 J	16	<25	<25
Chlorobenzene	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Chloroethane	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Chloroform	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Chloromethane	<1	<1	<1.0	0.21 J	<1	<12	<10	<4.2 J	<12	<25	<5.0
cis-1,2-Dichloroethene	1.5	3.8	6.1	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Diethylether	12	27	30	NA	NA	NA	NA	NA	<120	<250	34 J
Ethylbenzene	1.3	1.8	1.7	<1	<1	12	9.6 J	11 J	<12	<25	5.1
Furan	<5	<5	0.44 J	NA	NA	NA	NA	NA	<62	<120	7.5 J
Isopropylbenzene	<1	<1	<1.0	NA	NA	NA	NA	NA	<12	<25	<5.0
Methyl iodide	<5	<5	<5.0	NA	NA	NA	NA	NA	<12	<25	<25
Methyl(tert)butyl ether	<50	<50	<5.0	NA	NA	NA	NA	NA	<620	<1200	<25
Methylene chloride	<1	<6.3	<1.0	<1	<1	17	<10	<4.2 J	<12	<44	<5.0
n-Propylbenzene	<1	<1	<1.0	NA	NA	NA	NA	NA	<12	<25 J	<5.0
Propionitrile	NA	NA	<25	NA	NA	NA	NA	NA	NA	NA	<120
Styrene	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Tetrachloroethene	<1	<1	4.5	<1	<1	<12	<10	<4.2 J	<12	<25	2.5 J
Tetrahydrofuran	<5	13 J	<2.0	NA	NA	NA	NA	NA	<62	R	20 B
Toluene	16	19	14	0.56 J	<1	42	36	32 J	34	36	18
trans-1,2-Dichloroethene	1.1	1.6	1.5	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Trichloroethene	7.4	4.8	3	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Vinyl chloride	<1	<1	<1.0	<1	<1	<12	<10	<4.2 J	<12	<25	<5.0
Xylene, o	2.5	3	NA	NA	NA	NA	NA	NA	14	<25	NA
Xylenes (total)	6.4	8	8.8	<1	<1	45	38	43 J	40	<75	22
Xylenes, m+p	3.9	5	NA	NA	NA	NA	NA	NA	26	<50	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2C			GM-3A					GM-3B	
Top of Screen Depth (ft bls)	64	64	64	74	74	74	74	74	170	170
Sample Date	11/06/98	04/13/99	05/04/04	06/25/97	10/10/97	10/09/98	04/13/99	05/05/04	06/26/97	10/14/97
Sample ID	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-3A	GM-3A	GWGM-3A	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GM-3B
1,1-Dichloroethane	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
1,1-Dichloroethene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
1,2,4-Trimethylbenzene	<1	<1	<1.0	NA	NA	<1	<1	<1.0	NA	NA
1,2-Dichloroethene (total)	<1	<1	<2.0	NA	NA	<1	<1	<2.0	NA	NA
1,3,5-Trimethylbenzene	<1	<1	<1.0	NA	NA	<1	<1	<1.0	NA	NA
1,3-Dichlorobenzene	<5	<5	<1.0	<1	<1	<5	<5	<1.0	<5	<2.5
2-Butanone (MEK)	<10	<10 J	<50	<10	<10	<10	<10	<50	400	170
2-Hexanone	<10	<10	<50	<10	<10	<10	<10	<50	<50	24 J
4-Methyl-2-pentanone (MIBK)	<10	<10 J	<50	<10	<10	<10	<10	<50	<50	<25
Acetone	<10	R	<100	<10	<10	<10	R	<100	580	280
Acrylonitrile	<25	R	<25	NA	NA	<25	R	<25	NA	NA
Benzene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	20	15
Bromoform	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Bromomethane	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Carbon disulfide	<1	<1	<5.0	<1	<1	<1	<1	<5.0	<5	18
Chlorobenzene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Chloroethane	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Chloroform	<1	<1	<1.0	0.54 J	0.58 J	<1	<1	<1.0	<5	<2.5
Chloromethane	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
cis-1,2-Dichloroethene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	1.3 J
Diethylether	<10	<10	<10	NA	NA	<10	<10	<10	NA	NA
Ethylbenzene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	2.6 J	2.1 J
Furan	<5	<5	<2.0	NA	NA	<5	<5	<2.0	NA	NA
Isopropylbenzene	<1	<1	<1.0	NA	NA	<1	<1	<1.0	NA	NA
Methyl iodide	<5	<5	<5.0	NA	NA	<5	<5	<5.0	NA	NA
Methyl(tert)butyl ether	<50	<50	<5.0	NA	NA	<50	<50	<5.0	NA	NA
Methylene chloride	<1	<1	<1.0	<1	<1	<1	<1	<1.0	6.1	<2.5
n-Propylbenzene	<1	<1	<1.0	NA	NA	<1	<1	<1.0	NA	NA
Propionitrile	NA	NA	<25	NA	NA	NA	NA	<25	NA	NA
Styrene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Tetrachloroethene	<1	<1	2.5	<1	<1	<1	<1	1.3	<5	<2.5
Tetrahydrofuran	<5	R	<2.0	NA	NA	<5	R	<2.0	NA	NA
Toluene	<1	<1	<1.0	0.42 J	<1	<1	<1	<1.0	11	8.7
trans-1,2-Dichloroethene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Trichloroethene	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Vinyl chloride	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<5	<2.5
Xylene, o	<1	<1	NA	NA	NA	<1	<1	NA	NA	NA
Xylenes (total)	<3	<3	<3.0	<1	<1	<3	<3	<3.0	9.9	7.4
Xylenes, m+p	<2	<2	NA	NA	NA	<2	<2	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3B (continued)				GM-4				GM-5			GM-6
Top of Screen Depth (ft bls)	170	170	170	170	76	76	76	76	250	250	250	165
Sample Date	10/08/98	04/17/99	04/17/99	05/11/04	06/26/97	10/14/97	10/20/98	04/21/99	07/02/97	10/15/97	04/18/99	06/28/97
Sample ID	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)	GWGM-4	GM-4	GWGM-4	GWGM-4	GWGM-5	GM-5	GWGM-5	GWGM-6
1,1-Dichloroethane	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
1,1-Dichloroethene	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
1,2,4-Trimethylbenzene	<2	<4 J	<8	1.5	NA	NA	<1	<1	NA	NA	<1 J	NA
1,2-Dichloroethene (total)	<2	<4	<8	1.3 J	NA	NA	<1	<1	NA	NA	<1	NA
1,3,5-Trimethylbenzene	<2	<4 J	<8 J	<1.0	NA	NA	<1	<1	NA	NA	<1 J	NA
1,3-Dichlorobenzene	<10	<20	<40	<1.0	<1	<1	<5	<5	<1	<25	<5	<1
2-Butanone (MEK)	180	130 J	160	<50	<10	<10	<10	<10	<10	<250	<10 J	<10
2-Hexanone	27	<40	<80	13 J	<10	<10	<10	<10	<10	<250	29	<10
4-Methyl-2-pentanone (MIBK)	<20	<40 J	<80	8.8 J	<10	<10	<10	<10	<10	<250	<10 J	<10
Acetone	180	200 J	260 J	<100	<10	<10	<10	R	<10	<250	R	<10
Acrylonitrile	<25	<25 J	<25 J	<25	NA	NA	<25	<25	NA	NA	<25 J	NA
Benzene	21	20	21	15	0.17 J	<1	<1	<1	0.24 J	20 J	29	7.2
Bromoform	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Bromomethane	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Carbon disulfide	<2	12	<8	<5.0	<1	<1	<1	<1	<1	130	<1	1
Chlorobenzene	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Chloroethane	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Chloroform	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Chloromethane	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
cis-1,2-Dichloroethene	<2	<4	<8	1.3	<1	<1	<1	<1	<1	<25	<1	0.65 J
Diethylether	<20	<40	<80	19	NA	NA	<10	<10	NA	NA	31	NA
Ethylbenzene	2.5	5	8.2	2.6	<1	<1	<1	<1	0.25 J	<25	1.9	1.5
Furan	<10	<20	<40	0.52 J	NA	NA	<5	<5	NA	NA	<5	NA
Isopropylbenzene	<2	<4	<8	<1.0	NA	NA	<1	<1	NA	NA	<1	NA
Methyl iodide	<5	<5	<8	<5.0	NA	NA	<5	<5	NA	NA	<5	NA
Methyl(tert)butyl ether	<100	<200	<400	<5.0	NA	NA	<50	<50	NA	NA	<50	NA
Methylene chloride	<2	<4	<13	<1.0	<1	<1	<1	<1	<1	<25	<1	<1.0
n-Propylbenzene	<2	<4 J	<8 J	<1.0	NA	NA	<1	<1	NA	NA	<1 J	NA
Propionitrile	NA	NA	NA	<25	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Tetrachloroethene	<2	<4	9.4	3.6	<1	<1	<1	<1	<1	<25	<1	<1
Tetrahydrofuran	12	R	R	<2.0	NA	NA	<5	R	NA	NA	28 J	NA
Toluene	19	20	22	11	0.19 J	<1	<1	<1	0.55 J	9.2 J	15	8.2
trans-1,2-Dichloroethene	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Trichloroethene	<2	4.5	9.2	<1.0	<1	<1	<1	<1	0.071 J	<25	1.4	0.78 J
Vinyl chloride	<2	<4	<8	<1.0	<1	<1	<1	<1	<1	<25	<1	<1
Xylene, o	<2	5.8	<8	NA	NA	NA	<1	<1	NA	NA	3.7	NA
Xylenes (total)	8.9	16	<24	8.5	<1	<1	<3	<3	0.63 J	<25	6.6	5.2
Xylenes, m+p	<4	9.8	16	NA	NA	NA	<2	<2	NA	NA	2.9	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-6 (continued)				GM-7						GM-8		
Top of Screen Depth (ft bls)	165	165	165	165	145	145	145	145	145	145	79	79	79
Sample Date	10/22/97	10/10/98	04/19/99	07/19/00	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04	06/30/97	10/12/97	10/09/98
Sample ID	GM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)	GWGM-8	GM-8	GWGM-8
1,1-Dichloroethane	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,1-Dichloroethene	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,2,4-Trimethylbenzene	NA	1	1.1	0.64 J	NA	NA	<1	<1	<1.0	<1.0	NA	NA	<1
1,2-Dichloroethene (total)	NA	<1	<1	<2.0	NA	NA	<1	<1	<2.0	<2.0	NA	NA	<1
1,3,5-Trimethylbenzene	NA	<1	<1	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	NA	<1
1,3-Dichlorobenzene	<5	<5	<5	<1.0	<1	<1	<5	<5	<1.0	<1.0	<1	<1	<5
2-Butanone (MEK)	<50	<10	<10	<50 J	<10	<10	<10	<10	<10	<50	<10	<10	<10
2-Hexanone	<50	<10	<10	<50 J	<10	<10	<10	<10 J	<10	<50	<10	<10	<10 J
4-Methyl-2-pentanone (MIBK)	<50	<10	<10	<50	<10	<10	<10	<10 J	<10	<50	<10	<10	<10
Acetone	<50	<10	R	<100 J	<10	<10	<10	R	<25	<100	<10	<10	<10 J
Acrylonitrile	NA	<25	<25	R	NA	NA	<25	R	<20	<25	NA	NA	<25
Benzene	6	7.3	6.3	5.6	1.5	2.3	2.1	1.8	<1.0	0.60 J	<1	<1	<1
Bromoform	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Bromomethane	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Carbon disulfide	9.3	<1	5.9	<5.0	24	1.1	<1	<1	<1.0	<5.0	<1	<1	<1
Chlorobenzene	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroethane	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroform	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloromethane	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
cis-1,2-Dichloroethene	<5	<1	<1	0.62 J	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Diethylether	NA	<10	<10	<10	NA	NA	<10	<10	5	4.3 J	NA	NA	<10
Ethylbenzene	0.63 J	1.5	1.3	1.3	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Furan	NA	<5	<5	NA	NA	NA	<5	<5	<5.0	<2.0	NA	NA	<5
Isopropylbenzene	NA	<1	<1	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	NA	<1
Methyl iodide	NA	<5	<5	<5.0	NA	NA	<5	<5	<1.0	<5.0	NA	NA	<5
Methyl(tert)butyl ether	NA	<50	<50	<5.0	NA	NA	<50	<50	<10	<5.0	NA	NA	<50
Methylene chloride	<5	<1	<1	<1.0	<1	<1	<1	<1	<5.0	<1.0	<1.0	<1	<1
n-Propylbenzene	NA	<1	<1	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	NA	<1
Propionitrile	NA	NA	NA	<25	NA	NA	NA	NA	<20	<25	NA	NA	NA
Styrene	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Tetrachloroethene	<5	<1	<1	<1.0	<1	<1	<1	<1	5.3	2.5	<1	<1	<1
Tetrahydrofuran	NA	<5	R	NA	NA	NA	<5	R	<5.0	<2.0	NA	NA	<5
Toluene	6.3	7.6	6.1	5.7	0.92 J	0.45 J	<1	<1	1.4	<1.0	<1	<1	<1
trans-1,2-Dichloroethene	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Trichloroethene	<5	<1	<1	0.72 J	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Vinyl chloride	<5	<1	<1	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Xylene, o	NA	<1	2.1	NA	NA	NA	<1	<1	NA	NA	NA	NA	<1
Xylenes (total)	4.3 J	5.3	4.8	4	<1	<1	<3	<3	<2.0	<3.0	<1	<1	<3
Xylenes, m+p	NA	<2	2.6	NA	NA	NA	<2	<2	NA	NA	NA	NA	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8 (continued)		GM-9						GM-10			GM-11
Top of Screen Depth (ft bls)	79	79	164	164	164	164	164	164	170	170	170	174.7
Sample Date	04/13/99	10/21/99	10/13/97	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05	10/14/97	11/06/98	04/27/99	10/15/97
Sample ID	GWGM-8	GM-8	GM-9	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)	GM-10	GWGM-10	GWGM-10	GM-11
1,1-Dichloroethane	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<1	<1.0	NA	<1	<1 J	<1.0	<1.0	<1.0	NA	<1	<1	NA
1,2-Dichloroethene (total)	<1	<2.0	NA	<1	<1	<2.0	<2.0	<2.0	NA	<1	<1	NA
1,3,5-Trimethylbenzene	<1	<1.0	NA	<1	<1 J	<1.0	<1.0	<1.0	NA	<1	<1	NA
1,3-Dichlorobenzene	<5	<1.0	<1	<5	<5	<1.0	<1.0	<1.0	<1	<5	<5	<1
2-Butanone (MEK)	<10	<50	<10	<10	<10 J	<50	<50	<50	<10	<10	R	<10
2-Hexanone	<10	<50	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<50	<10	<10	<10 J	<50	<50	<50	<10	<10	<10 J	<10
Acetone	R	<100	<10	<10	R	<100	<100	<100	<10	<10	R	<10
Acrylonitrile	R	<25	NA	<25	<25 J	<25	<25	<25	NA	<25	R	NA
Benzene	<1	<1.0	0.47 J	<1	<1	<1.0	1.3	0.97 J	<1	<1	<1	<1
Bromoform	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Bromomethane	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Carbon disulfide	<1	<5.0	0.23 J	<1	2.4	<5.0	<5.0	<5.0	<1	<1	3.1	0.54 J
Chlorobenzene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Chloroethane	<1	<1.0 J	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Chloroform	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Chloromethane	<1	<1.0 J	<1	<1	<1	1.3	<1.0	<1.0	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Diethylether	<10	<10	NA	<10	<10	<10	4.9 J	3.5 J	NA	<10	<10	NA
Ethylbenzene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Furan	<5	NA	NA	<5	<5	<2.0	0.59 J	<10	NA	<5	<5	NA
Isopropylbenzene	<1	<1.0	NA	<1	<1	<1.0	<1.0	<1.0	NA	<1	<1	NA
Methyl iodide	<5	<5.0	NA	<5	<5	<5.0	<5.0	<5.0	NA	<5	<5	NA
Methyl(tert)butyl ether	<50	<5.0	NA	<50	<50	<5.0	<5.0	NA	NA	<50	<50	NA
Methylene chloride	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
n-Propylbenzene	<1	<1.0	NA	<1	<1 J	<1.0	<1.0	<1.0	NA	<1	<1	NA
Propionitrile	NA	<25	NA	NA	NA	<25	<25	<25	NA	NA	NA	NA
Styrene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Tetrachloroethene	<1	0.67 J	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Tetrahydrofuran	R	NA	NA	<5	R	<2.0	<2.0	<10	NA	<5	R	NA
Toluene	<1	<1.0	<1	<1	<1	<1.0	35	<1.0	<1	<1	<1	<1
trans-1,2-Dichloroethene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Trichloroethene	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Vinyl chloride	<1	<1.0	<1	<1	<1	<1.0	<1.0	<1.0	<1	<1	<1	<1
Xylene, o	<1	NA	NA	<1	<1	NA	NA	NA	NA	<1	<1	NA
Xylenes (total)	<3	<3.0	<1	<3	<3	<3.0	<3.0	<3.0	<1	<3	<3	<1
Xylenes, m+p	<2	NA	NA	<2	<2	NA	NA	NA	NA	<2	<2	NA

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-112[1]		GMSB-113[1]		
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/03/03	09/03/03	09/05/03	09/05/03	09/04/03
Sample ID	GBGWGMSB-112/134	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27
2,3-Dimethylphenol	<100	<10	<100	<10	<10
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	1,400	<10	1,000	<10	<10
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	<100	<10	350	<10	<10
2-Methylnaphthalene	<50	<5.0	<50	<5.0	<5.0
2-Methylphenol	<50	<5.0	<50	<5.0	<5.0
2-Nitrophenol	<50	<5.0	<50	<5.0	<5.0
3,4-Dimethylphenol	500	<10	<100	<10	<10
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<50	<5.0	<50	<5.0	<5.0
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<50	<5.0	<50	<5.0	<5.0
Benzo(a)anthracene	<50	<5.0	<50	<5.0	<5.0
Benzo(a)pyrene	<50	<5.0	<50	<5.0	<5.0
Benzo(b)fluoranthene	<50	5.7	<50	<5.0	<5.0
Benzo(g,h,i)perylene	<50	<5.0	<50	<5.0	<5.0
Benzo(k)fluoranthene	<50	<5.0	<50	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<50	<5.0	<50	<5.0	<5.0
Butylbenzylphthalate	<50	<5.0	<50	<5.0	<5.0
Carbazole	<50	<5.0	<50	<5.0	<5.0
Chrysene	<50	<5.0	<50	<5.0	<5.0
Dibenzo(a,h)anthracene	<50	<5.0	<50	<5.0	<5.0
Diethylphthalate	<50	<5.0	<50	<5.0	<5.0
Dimethylphthalate	<50	<5.0	<50	<5.0	<5.0
Di-n-butylphthalate	<50	<5.0	<50	<5.0	<5.0
Di-n-octylphthalate	<50	7.1	<50	<5.0	<5.0
Fluoranthene	<50	<5.0	<50	<5.0	<5.0
Hexachlorobenzene	<50	<5.0	<50	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	57	6.6	68	<5.0	6.2
Naphthalene	<50	<5.0	<50	<5.0	<5.0
Phenanthrene	<50	<5.0	<50	<5.0	<5.0
Phenol	<50	<5.0	<50	<5.0	<5.0
Pyrene	<50	<5.0	<50	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-116[1]		GMSB-117[1]		GMSB-118[1]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/12/03	08/11/03	08/14/03	08/15/03	08/16/03
Sample ID	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25
2,3-Dimethylphenol	<100	<10	<40	<50	<100
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	460	<10	340	940	300
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	150	<10	120	<50	<100
2-Methylnaphthalene	<50	<5.0	<20	<25	<50
2-Methylphenol	<50	<5.0	<20	<25	<50
2-Nitrophenol	<50	<5.0	<20	<25	<50
3,4-Dimethylphenol	<100	<10	<40	<50	<100
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<50	<5.0	<20	<25	<50
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<50	<5.0	<20	<25	<50
Benzo(a)anthracene	<50	<5.0	<20	<25	<50
Benzo(a)pyrene	<50	<5.0	<20	<25	<50
Benzo(b)fluoranthene	<50	<5.0	<20	<25	<50
Benzo(g,h,i)perylene	<50	<5.0	<20	<25	<50
Benzo(k)fluoranthene	<50	<5.0	<20	<25	<50
bis(2-Ethylhexyl)phthalate	<50	5	20	28	<50
Butylbenzylphthalate	<50	8.3	<20	<25	<50
Carbazole	<50	<5.0	<20	<25	<50
Chrysene	<50	<5.0	<20	<25	<50
Dibenzo(a,h)anthracene	<50	<5.0	<20	<25	<50
Diethylphthalate	<50	<5.0	<20	<25	<50
Dimethylphthalate	<50	<5.0	<20	<25	<50
Di-n-butylphthalate	<50	<5.0	<20	<25	70
Di-n-octylphthalate	<50	<5.0	<20	<25	<50
Fluoranthene	<50	<5.0	<20	<25	<50
Hexachlorobenzene	<50	<5.0	<20	<25	<50
Indeno(1,2,3-c,d)pyrene	<50	<5.0	<20	<25	<50
Naphthalene	<50	<5.0	<20	<25	<50
Phenanthrene	<50	<5.0	<20	<25	<50
Phenol	<50	<5.0	<20	<25	<50
Pyrene	<50	<5.0	<20	<25	<50

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-119[1]		GMSB-122[1]	GMSB-123[1]	Grailer
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/18/03	08/17/03	09/08/03	09/09/03	05/12/99
Sample ID	GBGWGMSB-119/12	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150	GBGW-53C
2,3-Dimethylphenol	<10	<10	<200	290	<11
2,4-Dimethylphenol	NA	NA	NA	NA	<5.4
2,4-Dimethylphenol/2,5-Dimethylphenol	48	<10	2,200	810	NA
2,5-Dimethylphenol	NA	NA	NA	NA	<22
2,6-Dimethylphenol	<10	<10	570	300	<11
2-Methylnaphthalene	<5.0	<5.0	<100	<50	<5.4
2-Methylphenol	<5.0	<5.0	410	<50	<5.4
2-Nitrophenol	<5.0	<5.0	<100	<50	<20
3,4-Dimethylphenol	<10	<10	200	<100	<11
3-Methylphenol	NA	NA	NA	NA	<11
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	2,300	<50	NA
4-Methylphenol	NA	NA	NA	NA	<5.4
Anthracene	<5.0	<5.0	<100	<50	<5.4
Benzo(a)anthracene	<5.0	<5.0	<100	<50	<5.4
Benzo(a)pyrene	<5.0	<5.0	<100	<50	<5.4
Benzo(b)fluoranthene	<5.0	<5.0	<100	<50	<5.4
Benzo(g,h,i)perylene	<5.0	<5.0	<100	<50	<5.4
Benzo(k)fluoranthene	<5.0	<5.0	<100	<50	<5.4
bis(2-Ethylhexyl)phthalate	<5.0	6.2	<100	<50	<5.4
Butylbenzylphthalate	<5.0	7.9	<100	<50	<5.4
Carbazole	<5.0	<5.0	<100	<50	<5.4 J
Chrysene	<5.0	<5.0	<100	<50	<5.4
Dibenzo(a,h)anthracene	<5.0	<5.0	<100	<50	<5.4
Diethylphthalate	<5.0	<5.0	<100	<50	<5.4
Dimethylphthalate	<5.0	<5.0	<100	<50	<5.4
Di-n-butylphthalate	<5.0	7.1	<100	<50	<5.4
Di-n-octylphthalate	<5.0	<5.0	<100	<50	<5.4
Fluoranthene	<5.0	<5.0	<100	<50	<5.4
Hexachlorobenzene	<5.0	<5.0	<100	<50	<5.4
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<100	<50	<5.4
Naphthalene	<5.0	<5.0	<100	<50	<11
Phenanthrene	<5.0	<5.0	<100	<50	<5.4
Phenol	<5.0	<5.0	350	<50	<5.4
Pyrene	<5.0	<5.0	<100	<50	<5.4

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Grailer (continued)	Hambel		Krans		Michaud	
Top of Screen Depth (ft bls)	--	--	--	--	--	--	--
Sample Date	08/07/03	05/01/99	08/06/03	05/01/99	08/06/03	05/01/99	08/06/03
Sample ID	GBGW-53C	GBGW-101C	GBGW-101C	GBGW-101F	GBGW-101F	GBGW-101G	GBGW-101G
2,3-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	NA	<5	NA	<5	NA	<5	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	NA	<10	NA	<10	NA	<10
2,5-Dimethylphenol	NA	<20	NA	<20	NA	<20	NA
2,6-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
2-Methylnaphthalene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
2-Methylphenol	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
2-Nitrophenol	<5.0	<20	<5.0	<20	<5.0	<20	<5.0
3,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
3-Methylphenol	NA	<10	NA	<10	NA	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
4-Methylphenol	NA	<5	NA	<5	NA	<5	NA
Anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(a)anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(a)pyrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(b)fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(g,h,i)perylene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(k)fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Butylbenzylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Carbazole	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Chrysene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Dibenzo(a,h)anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Diethylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Dimethylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Di-n-butylphthalate	<5.0	<5	6.9	<5	<5.0	<5	<5.0
Di-n-octylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Hexachlorobenzene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<5 J	<5.0	<5 J	<5.0	<5	<5.0
Naphthalene	<5.0	<10	<5.0	<10	<5.0	<10	<5.0
Phenanthrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Phenol	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Pyrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Schnieder		MPMW-4	MW-1B	MW-2B	MW-5	
Top of Screen Depth (ft bls)	--	--	--	86	102	83	83
Sample Date	05/03/99	08/07/03	02/26/02	06/27/97	06/28/97	10/22/98	04/30/99
Sample ID	GBGW-113	GBGW-113	GWMPMW-4 (2/26/02)	GWMW-1B	GWMW-2B	GWMW-5	GWMW-5
2,3-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
2,4-Dimethylphenol	<5	NA	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	<10	<5.0	NA	NA	NA	NA
2,5-Dimethylphenol	<20	NA	NA	NA	NA	NA	<20
2,6-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
2-Methylnaphthalene	<5	<5.0	<5.0	<5	<5	<5	<5
2-Methylphenol	<5	<5.0	<5.0	<5	<5	<5	<5
2-Nitrophenol	<20	<5.0	<5.0	<5	<5	<20	<20
3,4-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
3-Methylphenol	<10	NA	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	<5.0	<5.0	NA	NA	NA	NA
4-Methylphenol	<5	NA	NA	<5	<5	<5	<5
Anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)pyrene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(b)fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(k)fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<5	<5.0	0.61 J	<5	1.2 J	<5	<5
Butylbenzylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Carbazole	<5	<5.0	<5.0	<10	<10	<5	<5 J
Chrysene	<5	<5.0	<5.0	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Diethylphthalate	<5	<5.0	0.51 J	<5	<5	<5	<5
Dimethylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Di-n-butylphthalate	<5	<5.0	0.57 J	<5	<5	**15**	<5
Di-n-octylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
Hexachlorobenzene	<5	<5.0	<5.0	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5.0	<5.0	<5	<5	<5	<5
Naphthalene	<10	<5.0	<5.0	<5	<5	<10	<10
Phenanthrene	<5	<5.0	<5.0	<5	<5	<5	<5
Phenol	<5	<5.0	<5.0	<5	1.7 J	<5	<5
Pyrene	<5	<5.0	<5.0	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-8					MW-9A	UG-2		UG-4
Top of Screen Depth (ft bls)	133	133	133	133	133	57	48	48	103
Sample Date	06/29/97	06/29/97	10/24/98	05/03/99	05/12/04	07/02/97	10/27/98	05/03/99	10/13/97
Sample ID	GWGM-99	GWMW-8	GWMW-8	GWMW-8	GWMW-8 (5/12/04)-RE	GWMW-9A	GWUG-2	GWUG-2	GM-79
2,3-Dimethylphenol	NA	NA	NA	<100	180	NA	NA	<10	NA
2,4-Dimethylphenol	790	720	730 J	610	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	430	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	<200	NA	NA	NA	<20	NA
2,6-Dimethylphenol	NA	NA	NA	310	170	NA	NA	<10	NA
2-Methylnaphthalene	<62	<62	<25	<50	<50	<5	<5	<5	<5
2-Methylphenol	49 J	46 J	36 J	<50	18 J	<5	<5	<5	<5
2-Nitrophenol	<62	<62	<50	<100	<50	<5	<20	<20	<5
3,4-Dimethylphenol	NA	NA	NA	140	<100	NA	NA	<10	NA
3-Methylphenol	NA	NA	<50	<100	NA	NA	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	62	NA	NA	NA	NA
4-Methylphenol	<62	<62	<25	<50	NA	<5	<5	<5	<5
Anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(a)anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(a)pyrene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(b)fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(g,h,i)perylene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(k)fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<62	87	<25	<50	<50	7.3	<5	13	<5
Butylbenzylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Carbazole	<120	<120	<25	<50	<50	<10	<5	<5	<10
Chrysene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Diethylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Dimethylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Di-n-butylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Di-n-octylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Hexachlorobenzene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<62	<62	<25	<50	<50	<5	<5	<5 J	<5
Naphthalene	<62	<62	<50	<100	<50	<5	<10	<10	<5
Phenanthrene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Phenol	<62	<62	<25	<50	<50	<5	<5	<5	<5
Pyrene	<62	<62	<25	<50	<50	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4 (continued)			UG-6	Residental	Residential	Residential	Final	Final	Groundwater
Top of Screen Depth (ft bls)	103	103	103	236	Direct	Indoor	Drinking	Acute	Chronic	Surface Water
Sample Date	10/13/97	10/23/98	05/02/99	10/21/97	Contact	Air	Water	Value	Value	Interface
Sample ID	UG-4	GWUG-4	GWUG-4	UG-6	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria
2,3-Dimethylphenol	NA	NA	<10	NA	--	--	--	--	--	--
2,4-Dimethylphenol	<5	<5	<5	<5	520,000	NLV	370	2,700	380	380
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	520,000	NLV	370	2,700	380	380
2,5-Dimethylphenol	NA	NA	<20	NA	--	--	--	--	--	--
2,6-Dimethylphenol	NA	NA	<10	NA	6,300	NLV	4.4	--	--	--
2-Methylnaphthalene	<5	<5	<5	<5	25,000 S	ID	260	ID	ID	ID
2-Methylphenol	<5	<5	<5	<5	810,000 J	J,NLV	370 J	1,500	82	71 J
2-Nitrophenol	<5	<20	<20	<5	79,000	NLV	20	ID	ID	ID
3,4-Dimethylphenol	NA	NA	<10	NA	18,000	NLV	10	--	--	--
3-Methylphenol	NA	<10	<10	NA	810,000	J,NLV	370 J	1,271	71	71 J
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	810,000 J	J,NLV	370 J	450	25	71 J
4-Methylphenol	<5	<5	<5	<5	810,000	J,NLV	370 J	450	25	71 J
Anthracene	<5	<5	<5	<5	43 S	43 S	43 S	ID	ID	ID
Benzo(a)anthracene	<5	<5	<5	<5	9.4 (Q) S,AA	(Q) NLV	2.1 (Q)	ID	ID	(Q) ID
Benzo(a)pyrene	<5	<5	<5	<5	1 (Q) M,AA	(Q) NLV	5 (Q) A	ID	ID	(Q) ID
Benzo(b)fluoranthene	<5	<5	<5	<5	1.5 (Q) S,AA	(Q) ID	1.5 (Q) S, AA	ID	ID	(Q) ID
Benzo(g,h,i)perylene	<5	<5	<5	<5	1 M,AA	NLV	1 M	--	--	--
Benzo(k)fluoranthene	<5	<5	<5	<5	1 (Q) M,AA	(Q) NLV	1 (Q) M	--	--	(Q)
bis(2-Ethylhexyl)phthalate	<5	<5	<5	1.2 J	320 AA	NLV	6 A	285	ID*	32
Butylbenzylphthalate	<5	<5	<5	<5	2,700 S	NLV	1,200	630	67	14 X
Carbazole	<10	<5	<5	<10	7,400	NLV	85	72	4	10 M
Chrysene	<5	<5	<5	<5	1.6 (Q) S,AA	(Q) ID	1.6 (Q) S	ID	ID	(Q) ID
Dibenzo(a,h)anthracene	<5	<5	<5	<5	2 (Q) M,AA	(Q) NLV	2 (Q) M	ID	ID	(Q) ID
Diethylphthalate	<5	<5	<5	<5	1,100,000 S	NLV	5,500	2,000	110	110
Dimethylphthalate	<5	<5	<5	<5	4,200,000 S	NLV	73,000	--	--	--
Di-n-butylphthalate	<5	<5	<5	<5	11,000 S	NLV	880	75	9.7	9.7
Di-n-octylphthalate	<5	<5	<5	<5	400	NLV	130	ID	ID	ID
Fluoranthene	<5	<5	<5	<5	210 S	210 S	210 S	28	1.6	1.6
Hexachlorobenzene	<5	<5	<5	<5	4.6	440	IA	ID	ID	0.2 M
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	2 (Q) AA,M	(Q) NLV	2 (Q) M	ID	ID	(Q) ID
Naphthalene	<5	<10	<10	<5	31,000 S	31,000 S	520	200	13	13
Phenanthrene	<5	<5	<5	<5	1,000 S	1,000 S	52	43	2.4	2.4
Phenol	<5	<5	<5	<5	29,000,000	NLV	4,400	6,800	450	210
Pyrene	<5	<5	<5	<5	140 S	140 S	140 S	ID	ID	ID

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results reported in micrograms per liter (µg/L).

<	Less than detection limit.
	Indicates a value above the Residential and Commercial I Direct Contact Criteria (Operational Memorandum #1, January 23, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
--	Not applicable.
*	LCS or LCSD esceeds the control limits.
(I)	Indicates a value above the Residential Indoor Inhalation Criteria (Operational Memorandum #1, January 23, 2006).
(1)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 457, Part 4, Rule 57, December 11, 2006).
D	Result was obtained from analysis of a dilution.
E	Analyte was detected at a concentration greater than the calibration range, and is therefore estimated.
Italics	Indicates a value above the Final Acute Value Criteria (Michigan Act 457, Part 4, Rule 57, December 11, 2006).
J	Estimated result.
R	Rejected result.
NA	Not analyzed.
SVOCs	Semi-volatile organic compounds.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

*	The lowest Human Noncancer Value, Wildlife Value, Human Cancer Value, Final Chronic Value Criteria per Michigan Act 451, Part 4, Rule 57 given for this chemical will adequately protect the uses identified with "ID".
A	State of Michigan Drinking Water Standard.
AA	Compound may be adsorbed to particulates rather than dissolved in water; filtered groundwater sample may be more appropriate for comparison to criteria.
I	Chemical may exhibit the characteristic of ignitability, as defined in 40 CFR 261.21.
ID	Insufficient data.
J	Chemical may be present in several isomer forms. Isomer specific concentrations must be added together for comparison to criteria.
M	Calculated criterion is below the analytical method detection limit (MDL).
NLV	Chemical is not likely to volatilize under most soil conditions.
Q	Criterion for carcinogenic polycyclic aromatic hydrocarbons (PAHs) were developed using "relative potential potencies" (RFPs) to benzo(a)pyrene.
S	Criterion defaults to the chemical-specific water solubility limit.
X	The GSI criterion shown is not protective for surface water that is used as a drinking water source.

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A	BR-5B		BR-6	CW-1			GM-1	
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130	220	220
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99	06/24/97	10/09/97
Sample ID	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1	GWGM-1	GM-1
Alkalinity	200,000	320,000	460,000	330,000	320,000	210,000	440,000	380,000	380,000	650,000	720,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	53,000	11,000	40,000	35,000	35,000	6,000	8,000	7,200	7,600	13,000	11,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	***1,000***	***900***	***1,200***	<200	<200	<200	<200	<200	<200
Unionized Ammonia [1]	<7.6	<7.6	38	34	46	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<100 J	100 J	<100	<100	<100	5,800	<100	<100	<100	<100	<100
Nitrogen, Nitrite	<100 J	<100 J	<100	<100	<100	<100	<100	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA	<100	<100	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	600	<100	<100	<100	<100	500	<100	<100	<100	1,700
Silica	20,000	21,000	56,000	26,000	41,000	8,300	36,000	<100	18,300	43,000	33,000
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	13,000	52,000	320,000	2,600,000	390,000	22,000	<5,000	<5,000	<5,000	14,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	2,000	12,000	2,000	1,600	1,600	1,700	840	<1,000	1,000	1,700	<500

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1 (continued)			GM-2A		GM-2B				
Top of Screen Depth (ft bls)	220	220	220	40	40	271	271	271	271	271
Sample Date	10/07/98	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97	12/11/97	11/22/98	04/16/99
Sample ID	GWGM-1	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B	GM-2B	GWGM-2B	GWGM-2B
Alkalinity	670,000	690,000	690,000	180,000	220,000	970,000	1,100,000	3,000,000	1,000,000	850,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	<40,000 M	9,700	13,000	150,000	140,000	54,000	60,000	54,000	47,000	40,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<30	<200	<200	<200	<200	<200	220	<200
Unionized Ammonia [1]	<7.6	<7.6	<1.14	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<100	<100	<50	<100	<100	<100	<100	<100	<100	<100
Nitrogen, Nitrite	<100	<100	<50	<100	<100	<100	<100	<100	<100	<100 J
Nitrogen, Nitrite and Nitrate	<100	<100	NA	NA	NA	NA	NA	NA	<100	<100
Ortho-Phosphate	NA	NA	<50	NA	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	130	140	<100	600	1,200	1,400	1,800	270	320
Silica	<100	23,000	NA	29,000	23,000	27,000	26,000	25,000	<100	20,000
Silica, Dissolved	NA	NA	34,000	NA	NA	NA	NA	NA	NA	NA
Sulfate	<5,000	<10,000 M	<5,000	24,000	16,000	<5,000	6,000	120,000	<5,000	<20,000 M
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	2,600	1,400	<1000	2,600	780	9,000	1,500	5,700	<2,000 M	2,200

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2B (continued)	GM-2C			GM-3A				
Top of Screen Depth (ft bls)	271	64	64	64	74	74	74	74	74
Sample Date	05/25/04	11/06/98	04/13/99	05/04/04	06/25/97	10/10/97	10/09/98	04/13/99	05/05/04
Sample ID	GWGM-2B(5/25/04)	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-3A	GM-3A	GWGM-3A	GWGM-3A	GWGM-3A (5/5/04)
Alkalinity	1,100,000	190,000	190,000	190,000	200,000	210,000	200,000	200,000	220,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	40,000	60,000	65,000	230,000	53,000	51,000	44,000	42,000	72,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<150 *F65	<200	<200	71	<200	<200	<200	<200	<30
Unionized Ammonia [1]	<5.7	<7.6	<7.6	2.70	<7.6	<7.6	<7.6	<7.6	<1.14
Nitrogen, Nitrate	<50	<100	<100 J	<250 *F65	2,500	3,300	4,100	4,000	<50
Nitrogen, Nitrite	64	<100 J	<100	<50	100	<100	<100	<100	<50
Nitrogen, Nitrite and Nitrate	NA	<100	<100	NA	NA	NA	4,100	4,000	NA
Ortho-Phosphate	<50	NA	NA	<50	NA	NA	NA	NA	<50
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	230	<100	<100	82 B	700	1,300	<100	<100	<100
Silica	NA	19,000	31,000	NA	26,000	16,000	<100	12,000	NA
Silica, Dissolved	20,000	NA	NA	32,000	NA	NA	NA	NA	17,000
Sulfate	<5,000	20,000	11,000	25,000	42,000	38,000	47,000	<10,000 M	20,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	1,900	570	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3B						GM-4			
Top of Screen Depth (ft bls)	170	170	170	170	170	170	76	76	76	76
Sample Date	06/26/97	10/14/97	10/08/98	04/17/99	04/17/99	05/11/04	06/26/97	10/14/97	10/20/98	04/21/99
Sample ID	GWGM-3B	GM-3B	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)	GWGM-4	GM-4	GWGM-4	GWGM-4
Alkalinity	730,000	940,000	820,000	810,000	800,000	940,000	220,000	240,000	230,000	210,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	17,000	16,000	16,000	16,000	15,000	15,000	2,000	1,000	3,900	1,400
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	<30	<200	<200	<200	<200
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	<1.14	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<100	<100	<100	<100	<100	<50	100	100	140	160
Nitrogen, Nitrite	<100	<100	<100	<100 J	<100 J	<50	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	NA	NA	<100	<100	<100	NA	NA	NA	140	160
Ortho-Phosphate	NA	NA	NA	NA	NA	<50	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	100	230	160	160	130	100	100	<100	400
Silica	34,000	32,000	<100	21,000	19,000	NA	5900	17,000	<100	13,000
Silica, Dissolved	NA	NA	NA	NA	NA	32,000	NA	NA	NA	NA
Sulfate	<5,000	<5,000	14,000	<5,000	<5,000	<5,000	<5,000	22,000	20,000	18,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	1,700	1,300	3,600	<1,000	<1,000	<1,000	1,600	1,200	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-5					GM-6						
Top of Screen Depth (ft bls)	250	250	250	250	250	165	165	165	165	165	165	165
Sample Date	07/02/97	10/15/97	04/18/99	08/15/00	09/20/00	06/28/97	10/22/97	10/10/98	04/19/99	02/29/00	07/19/00	09/25/00
Sample ID	GWGM-5	GM-5	GWGM-5	GWGM-5	GWGM-5	GWGM-6	GM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6
Alkalinity	970,000	1,100,000	1,000,000	NA	NA	710,000	870,000	690,000	670,000	NA	630,000	NA
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	1,100,000	1,100,000	NA	NA	NA	NA	630,000	NA	750,000
Chloride	17,000	18,000	17,000	18,000 J	18,000	12,000	11,000	<40,000 M	14,000	NA	240,000	18,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	16,000	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	NA	NA	<200	<200	<200	<200	NA	<30	NA
Unionized Ammonia [1]	<7.6	<7.6	<7.6	NA	NA	<7.6	<7.6	<7.6	<7.6	NA	<1.14	NA
Nitrogen, Nitrate	<100	<100	<100	NA	NA	<100 J	<100	<100	<100	NA	<50	NA
Nitrogen, Nitrite	<100	<100	<100 J	NA	NA	<100 J	<100	<100 J	<100	NA	<50	NA
Nitrogen, Nitrite and Nitrate	NA	NA	<100	NA	NA	NA	NA	<100	<100	NA	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	230	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	200	<100	NA	NA	<100	<100	<100	<100	NA	NA	NA
Silica	32,000	36,000	34,000	NA	NA	20,000	40,000	<100	26,000	NA	NA	NA
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37,000 J	NA
Sulfate	23,000	<5,000	<5,000	<5,000	<5,000	<5,000	24,000	<5,000	<20,000 M	NA	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5,000	NA	NA
Sulfide	2,000	1,000	1,800	NA	NA	1,500	<500	2,400	<1,000	NA	<100 J	NA

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-7						GM-8				GM-9
Top of Screen Depth (ft bls)	145	145	145	145	145	145	79	79	79	79	164
Sample Date	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04	06/30/97	10/12/97	10/09/98	04/13/99	10/13/97
Sample ID	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)	GWGM-8	GM-8	GWGM-8	GWGM-8	GM-9
Alkalinity	260,000	300,000	300,000	300,000	250,000	230,000	200,000	220,000	200,000	210,000	190,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	23,000	19,000	18,000	18,000	19,000	18,000	58,000	58,000	63,000	63,000	4,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<30	28 B	<200	***400***	<200	<200	***400***
Unionized Ammonia [(1)]	<7.6	<7.6	<7.6	<7.6	<1.14	1.06	<7.6	15.2	<7.6	<7.6	15.2
Nitrogen, Nitrate	300	600	320	220	200	150	3,900	4,300	4,600	4,500	<100
Nitrogen, Nitrite	<100	<100	<100	<100	<50	<50	<100	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	NA	NA	320	220	NA	NA	NA	NA	4,600	4,500	NA
Ortho-Phosphate	NA	NA	NA	NA	<50	<50	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	100	370	120	190	<100	<100	<100	<100	<100	200
Silica	31,000	30,000	<100	21,700	NA	NA	16,000	14,000	<100	11,000	17,000
Silica, Dissolved	NA	NA	NA	NA	32,000	29,000	NA	NA	NA	NA	NA
Sulfate	23,000	12,000	11,000	7,000	7,100	5,000 B	25,000	24,000	27,000	<10,000 M	13,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	2,800	1,100	<1,000	<1,000	<1,000	<1,000	<500	1,000	3,600	<1,000	<500

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-9 (continued)					GM-10			GM-11	GM-12
Top of Screen Depth (ft bls)	164	164	164	164	164	170	170	170	174.7	290
Sample Date	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05	10/14/97	11/06/98	04/27/99	10/15/97	10/22/97
Sample ID	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)	GM-10	GWGM-10	GWGM-10	GM-11	GM-12
Alkalinity	190,000	200,000	180,000	230,000	200,000	150,000	140,000	140,000	140,000	260,000
Ammonia	NA	NA	NA	NA	**72**	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	1,700	1,900	7,300	2,300	1,000	<1,000	1,300	1,200	1,000	33,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	**200**	**89**	NA	***400***	<200	<200	<200	**200**
Unionized Ammonia [1]	<7.6	<7.6	7.6	3.38	NA	15.58	<7.6	<7.6	<7.6	7.6
Nitrogen, Nitrate	<100	<100	<50	<50	<50	<100	<100	<100	<100	<100
Nitrogen, Nitrite	<100 J	<100 J	<50	<50	<50	<100	<100 J	<100 J	<100	<100
Nitrogen, Nitrite and Nitrate	<100	<100	NA	NA	NA	NA	<100	<100	NA	NA
Ortho-Phosphate	NA	NA	<50	37 B	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	<50	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	600	190	<100	400	200
Silica	<100	16,000	NA	NA	NA	18,000	<100	100	16,000	17,000
Silica, Dissolved	NA	NA	18,000	26,000	22,000	NA	NA	NA	NA	NA
Sulfate	11,000	10,000	17,000	8,700	8,000	14,000	14,000	14,000	10,000	34,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	2,300	<1,000	<1,200	2,000	<500

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-12 (continued)		GM-13			GM-14			GM-15	
Top of Screen Depth (ft bls)	**290**	**290**	**325**	**325**	**325**	**135**	**135**	**135**	**165**	**165**
Sample Date	**10/10/98**	**04/19/99**	**10/22/97**	**04/20/99**	**05/18/04**	**10/21/97**	**10/28/98**	**05/02/99**	**10/20/97**	**10/11/98**
Sample ID	**GWGM-12**	**GWGM-12**	**GM-13**	**GWGM-13**	**GWGM-13 (5/18/04)**	**GM-14**	**GWGM-14**	**GWGM-14**	**GM-15**	**GWGM-15**
Alkalinity	280,000	260,000	300,000	340,000	250,000	280,000	270,000	250,000	180,000	180,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	37,000	33,000	14,000	16,000	110,000	14,000	13,000	13,000	2,000	1,600
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**210**	**210**	<200	<200	***1,200***	***3,300***	***3,700***	***3,300***	**300**	**240**
Unionized Ammonia [(1)]	7.98	7.98	<7.6	<7.6	46	125	141	125	11.4	9.12
Nitrogen, Nitrate	<100	<100	<100	<100	<50	<100	<100	<100	<100	<100
Nitrogen, Nitrite	<100 J	<100	<100	<100 J	<50	<100	<100	<100	<100	<100 J
Nitrogen, Nitrite and Nitrate	<100	<100	NA	<100	NA	NA	<100	<100	NA	<100
Ortho-Phosphate	NA	NA	NA	NA	76	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	200	<100	190	1,800	<100	<100	300	120
Silica	<100	12,000	20,000	13,000	NA	20,000	<100	16,300	23,000	<100
Silica, Dissolved	NA	NA	NA	NA	9,800	NA	NA	NA	NA	NA
Sulfate	26,000	20,000	10,000	<5,000	<5,000	<5,000	<5,000	<5,000	10,000	6,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<500	<1,000	<1,000	<500	<1,000	<1,000	<500	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)			GM-16				
Top of Screen Depth (ft bls)	**165**	**165**	**165**	**108**	**108**	**108**	**108**	**108**
Sample Date	**04/20/99**	**05/10/04**	**05/10/04**	**10/22/97**	**10/22/97**	**10/09/98**	**04/14/99**	**09/23/03**
Sample ID	**GWGM-15**	**GWGM-15 (5/10/04)**	**GWGM-996 (5/10/04)**	**GM-16**	**GM-78**	**GWGM-16**	**GWGM-16**	**GM-16**
Alkalinity	200,000	210,000	210,000	260,000	260,000	230,000	250,000	53,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	1,200	940 B	1,100	60,000	58,000	58,000	62,000	110,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**250**	**130**	**130**	<200	<200	<200	<200	<30
Unionized Ammonia [(1)]	9.5	10.79	10.79	<7.6	<7.6	<7.6	<7.6	<1.14
Nitrogen, Nitrate	<100	<50	27 B	2,900	2,900	3,100	2,900	2,900
Nitrogen, Nitrite	<100 J	<50	<50	<100	<100	<100	<100	<50
Nitrogen, Nitrite and Nitrate	<100	NA	NA	NA	NA	3,100	2,900	NA
Ortho-Phosphate	NA	58	56	NA	NA	NA	NA	<50
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	150	88 J	66 J	<100	<200	<100	<100	<100
Silica	20,000	NA	NA	16,000	16,000	<100	12,000	NA
Silica, Dissolved	NA	29,000	27,000	NA	NA	NA	NA	19,000
Sulfate	<5,000	<5000	<5,000	22,000	<10,000 G	24,000	20,000	23,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	800	<500	5,500	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-16 (continued)	GM-17			GM-18		GM-19	GM-20	GM-21	
Top of Screen Depth (ft bls)	108	224.3	224.3	224.3	50	50	46	42	5	5
Sample Date	04/27/04	10/28/97	10/12/98	04/26/99	12/04/97	11/07/98	12/04/97	12/05/97	12/03/97	12/03/97
Sample ID	GWGM-16 (4/27/04)	GM-17	GWGM-17	GWGM-17	GM-18	GWGM-18	GM19	GM-20	GM-21	GM-95
Alkalinity	260,000	130,000	150,000	200,000	220,000	210,000	440,000	<5,000	470,000	440,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	100,000	24,000	19,000	28,000	13,000	6,000	1,000	1,000	13,000	14,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	**200**	**320**	<200	<200	<200	<200	<200	<200	<200
Unionized Ammonia [1]	<1.14	7.6	12.16	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	2,500	<100	<100	<100	700	490	500	40,000	<100	<100
Nitrogen, Nitrite	34 B	<100	790	<100 J	<100	<100 J	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	NA	NA	260	<100	NA	490	NA	NA	NA	NA
Ortho-Phosphate	31 B	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	600	<100	<100	1,000	<100	1,100
Silica	NA	14,000	<100	3,860	9,700	<100	13,000	99,000	19,000	24,000
Silica, Dissolved	17,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	25,000	7,000	23,000	<5,000	140,000	19,000	36,000	260,000	180,000	170,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	1,400	<500	<1,000	<1,000	<1,000	1,300	1,500	1,500	1,200	1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-21 (continued)	GM-22			GM-23			
Top of Screen Depth (ft bls)	5	6	6	6	3.5	3.5	3.5	3.5
Sample Date	10/13/98	12/05/97	10/10/98	04/13/99	12/03/97	10/10/98	05/12/04	05/12/04
Sample ID	GWGM-21	GM-22	GWGM-22	GWGM-22	GM-23	GWGM-23	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)
Alkalinity	390,000	230,000	200,000	420,000	550,000	350,000	160,000	160,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	10,000	43,000	74,000	100,000	5,000	4,800	57,000	56,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	***670***	<200	<200	<30	<30
Unionized Ammonia [(1)]	<7.6	<7.6	<7.6	25.46	<7.6	<7.6	<1.14	<1.14
Nitrogen, Nitrate	<100	<100	340	<100 J	<100	<100	<50	<50
Nitrogen, Nitrite	<100	<100	<100 J	<100	<100	<100 J	<50	<50
Nitrogen, Nitrite and Nitrate	<100	NA	340	<100	NA	<100	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	<50	31 B
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	1,000	<100	<100	<100	630	<100	<100
Silica	<100	16,000	<100	15,000	20,000	<100	NA	NA
Silica, Dissolved	NA	NA	NA	NA	NA	NA	8,700	9,000
Sulfate	160,000	30,000	18,000	11,000	25,000	29,000	23,000	23,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	720	<1,000	<1,000	1,200	<2,000 M	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24A		GM-24B					GM-24C
Top of Screen Depth (ft bls)	71	71	104	104	104	104	104	193
Sample Date	11/09/98	05/04/99	11/17/98	11/17/98	05/05/99	04/29/04	05/04/04	11/20/98
Sample ID	GWGM-24A	GWGM-24A	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24B (5/4/04)	GWGM-24C
Alkalinity	180,000	150,000	230,000	230,000	210,000	220,000	NA	160,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	6,800	18,000	15,000	16,000	18,000	20,000	NA	4,500
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	***810***	NA	<200
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	30.78	NA	<7.6
Nitrogen, Nitrate	<100	<100	2,000	1,800	2,700	1,300	NA	<100
Nitrogen, Nitrite	<100	<100	<100	100	<100	100	NA	<100
Nitrogen, Nitrite and Nitrate	<100	<100	2,000	1,900	2,700	NA	NA	<100
Ortho-Phosphate	NA	NA	NA	NA	NA	56	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	<100	NA	<100
Silica	<100	<100	<100	<100	10,500	NA	NA	<100
Silica, Dissolved	NA	NA	NA	NA	NA	NA	13,000	NA
Sulfate	33,000	12,000	21,000	31,000	32,000	34,000	NA	9,400
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	NA	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C (continued)				GM-25A			
Top of Screen Depth (ft bls)	193	193	193	193	19	19	19	19
Sample Date	11/20/98	05/13/99	09/24/03	04/29/04	10/06/98	04/16/99	08/21/00	09/09/03
Sample ID	GWGM-93	GWGM-24C	GM-24C	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GWGM-25A	GM-25A
Alkalinity	140,000	150,000	170,000	160,000	1,400,000	1,400,000	NA	1,100,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	1,400,000	NA
Chloride	4,400	5,000	3,200	2,600	<160,000 M	11,000	11,000 J	9,900
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	**290**	**280**	<200	<200	NA	**150**
Unionized Ammonia [1]	<7.6	<7.6	11.02	10.64	<7.6	<7.6	NA	5.7
Nitrogen, Nitrate	<100	<100	<50	<50	<100	<100	NA	<50
Nitrogen, Nitrite	<100	<100	<50	<50	<100	<100	NA	<50
Nitrogen, Nitrite and Nitrate	<100	<100	NA	NA	<100	<100	NA	NA
Ortho-Phosphate	NA	NA	280	350	NA	NA	NA	<50
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	270	630	330	220	<100	NA	<100
Silica	<100	11,000	NA	NA	<100	38,000	NA	NA
Silica, Dissolved	NA	NA	14,000	14,000	NA	NA	NA	46,000
Sulfate	11,000	24,000	16,000	17,000	52,000	<10,000 M	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	1,000	<1,000	<6,000 M	1,900	NA	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25A (continued)	GM-25B					GM-25C	
Top of Screen Depth (ft bls)	19	98	98	98	98	98	206	206
Sample Date	05/12/04	10/06/98	04/27/99	04/17/00	09/09/03	05/18/04	11/09/98	11/09/98
Sample ID	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GWGM-25B	GM-25B	GWGM-25B (5/18/04)	GWGM-25C	GWGM-95
Alkalinity	1,100,000	2,200,000	2,300,000	2,700,000	2,900,000	2,900,000	170,000	170,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	17,000	<80,000 M	<64,000 M	NA	19,000	20,000	12,000	12,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<60 *F65	<200	**250**	NA	***2,200***	<1,500 *F65	<200	<200
Unionized Ammonia [1]	<2.28	<7.6	9.50	NA	83.6	<57	<7.6	<7.6
Nitrogen, Nitrate	<50	<200	<1,000	NA	<50	<50	<100	<100
Nitrogen, Nitrite	<50	<200 M	<1,000 M	NA	<50	<50	<100	<100
Nitrogen, Nitrite and Nitrate	NA	<100	<100	NA	NA	NA	<100	<100
Ortho-Phosphate	<50	NA	NA	NA	<50	<50	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	140	<100	NA	<100	<100	330	<100
Silica	NA	<100	16,000	NA	NA	NA	<100	<100
Silica, Dissolved	42,000	NA	NA	NA	56,000	55,000	NA	NA
Sulfate	<5,000	17,000	<20,000 M	NA	13,000	<5,000	7,300	7,400
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	6,600	NA	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C (continued)					GM-26A		
Top of Screen Depth (ft bls)	**206**	**206**	**206**	**206**	**206**	**30**	**30**	**30**
Sample Date	**04/20/99**	**08/02/00**	**09/15/03**	**05/04/04**	**08/01/05**	**10/07/98**	**04/14/99**	**08/16/00**
Sample ID	**GWGM-25C**	**GWGM-25C**	**GM-25C**	**GWGM-25C (5/4/04)**	**GWGM-25C (08/01/05)**	**GWGM-26A**	**GWGM-26A**	**GWGM-26A**
Alkalinity	200,000	47,000	240,000	270,000	280,000	840,000	1,300,000	NA
Ammonia	NA	NA	NA	NA	**36**	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	1,200,000
Chloride	14,000	14,000 J	14,000	16,000	15,000	<40,000 M	19,000	21,000 J
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	**89**	**120**	**35**	NA	<200	<200	NA
Unionized Ammonia [1]	<7.6	3.38	4.56	1.33	NA	<7.6	<7.6	NA
Nitrogen, Nitrate	<100	<50 J	<50	<50	36 J	<200	<100	NA
Nitrogen, Nitrite	<100 J	<50	<50	<50	<50	<200 M	<100	NA
Nitrogen, Nitrite and Nitrate	<100	NA	NA	NA	NA	<100	<100	NA
Ortho-Phosphate	NA	160	<50	74	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	97	NA	NA	NA
Phosphorus	<100	NA	<100	160	240	<100	<100	NA
Silica	12,000	NA	NA	NA	NA	<100	33,000	NA
Silica, Dissolved	NA	14,000	16,000	17,000	16,000	NA	NA	NA
Sulfate	12,000	<5,000	<5,000	<5,000	<5,000	17,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	180	<1,000	<1,000	<1,000	3,200	2,600	NA

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A (continued)		GM-26B					
Top of Screen Depth (ft bls)	30	30	101	101	101	101	101	101
Sample Date	09/09/03	05/13/04	10/07/98	04/15/99	07/18/00	09/09/03	04/27/04	07/28/05
Sample ID	GM-26A	GWGM-26A (5/13/04)	GWGM-26B	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B (4/27/04)	GWGM-26B (072805)
Alkalinity	920,000	1,300,000	170,000	170,000	150,000	170,000	180,000	170,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	**48**
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	25,000	22,000	1,200	<1,000	<1,000	<1,000	740 B	<1,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**110**	<60 *F65	<200	<200	**64**	**180**	**85**	NA
Unionized Ammonia [1]	4.18	<2.28	<7.6	<7.6	2.43	6.84	3.23	NA
Nitrogen, Nitrate	<50	<50	<100	<100	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<100	<100	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	<100	<100	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	NA	NA	74	<50	<50	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	<50
Phosphorus	<100	<100	<100	<100	NA	<100	<100	<100
Silica	NA	NA	<100	17,000	NA	NA	NA	NA
Silica, Dissolved	33,000	37,000	NA	NA	22,000	24,000	24,000	18,000
Sulfate	<5,000	<5,000	9,400	<5,000	38,000 J	8,300	7,700	6,500
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	4,200	<1,000	<100 J	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26C						GM-27A	
Top of Screen Depth (ft bls)	160	160	160	160	160	160	30	30
Sample Date	10/25/98	04/17/99	08/16/00	09/16/03	05/18/04	05/18/04	10/08/98	04/15/99
Sample ID	GWGM-26C	GWGM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)	GWGM-994 (5/18/04)	GWGM-27A	GWGM-27A
Alkalinity	840,000	920,000	NA	1,500,000	1,600,000	1,600,000	1,200,000	1,200,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	1,200,000	NA	NA	NA	NA	NA
Chloride	20,000	18,000	23,000 J	20,000	21,000	21,000	<160,000 M	16,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**270**	**240**	NA	**64**	**56**	**50**	<200	<200
Unionized Ammonia [1]	10.26	9.12	NA	2.43	2.13	1.9	<7.6	<7.6
Nitrogen, Nitrate	<200	<100	NA	<50	<50	<50	<100	<100
Nitrogen, Nitrite	<200 M	<100 J	NA	<50	<50	<50	<100	<100 J
Nitrogen, Nitrite and Nitrate	<100	<100	NA	NA	NA	NA	<100	<100
Ortho-Phosphate	NA	NA	NA	<50	<50	<50	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	NA	150	170	150	<100	<100
Silica	<100	32,000	NA	NA	NA	NA	<100	39,000
Silica, Dissolved	NA	NA	NA	55,000	46,000	49,000	NA	NA
Sulfate	<5,000	<20,000 M	<5,000	<5,000	<5,000	<5,000	5,200	<10,000 JM
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	1,800	2,500	NA	<1,000	<1,000	<1,000	1,200	2,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)		GM-27B					
Top of Screen Depth (ft bls)	30	30	145	145	145	145	145	145
Sample Date	09/10/03	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04	04/30/04
Sample ID	GM-27A	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)	GWGM-998 (4/30/04)
Alkalinity	1,300,000	1,300,000	140,000	130,000	130,000	160,000	150,000	150,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	<1,000	20,000	5,100	1,500	<1,000	18,000	880 B	750 B
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**42**	<60 *F65	<200	***370***	**140**	**210**	**100**	**100**
Unionized Ammonia [1]	1.6	<2.28	<7.6	14.06	5.32	7.98	3.8	3.8
Nitrogen, Nitrate	<50	28 B	<100 J	<100	<50	<50	<50 *F70	<50 *F70
Nitrogen, Nitrite	<50	<50	<100	<100	<50	<50	<50 *F70	<50 *F70
Nitrogen, Nitrite and Nitrate	NA	NA	<100	<100	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	NA	NA	110	<50	47 B*F70	35 B*F70
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	70 J	170	200	NA	<100	<100	<100
Silica	NA	NA	<100	15,000	NA	NA	NA	NA
Silica, Dissolved	54,000	49,000	NA	NA	18,000	21,000	23,000	22,000
Sulfate	<5,000	<5,000	61,000	5,200	<5,000	8,100	6,800	6,900
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<100 J	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B (continued)		GM-27C					
Top of Screen Depth (ft bls)	**145**	**145**	**210**	**210**	**210**	**210**	**210**	**210**
Sample Date	**08/05/05**	**12/07/06**	**11/09/98**	**04/26/99**	**04/26/99**	**08/07/00**	**09/11/03**	**04/30/04**
Sample ID	**GWGM-27B (08/05/05)**	**GWGM27B (12/7/06)**	**GWGM-27C**	**GWGM-27C**	**GWGM-86**	**GMGW-27C**	**GM-27C**	**GWGM-27C (4/30/04)**
Alkalinity	140,000	160,000	150,000	150,000	150,000	170,000	160,000	170,000
Ammonia	**88**	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	<1,000	<1,000	1,500	1,600	1,500	1,500	1,500	1,800
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	NA	**110**	<200	<200	<200	**120**	**170**	**130**
Unionized Ammonia [1]	NA	4.18	<7.6	<7.6	<7.6	4.56	6.46	4.94
Nitrogen, Nitrate	<50	<50	<100	<100	<100	<50	190	<50 *F70
Nitrogen, Nitrite	<50	<50	<100	<100 J	<100 J	<50	<50	<50 *F70
Nitrogen, Nitrite and Nitrate	NA	NA	<100 J	<100	<100	NA	NA	NA
Ortho-Phosphate	NA	31 J	NA	NA	NA	110	<50	26 B*F70
Phosphate	30 J	NA	NA	NA	NA	NA	NA	NA
Phosphorus	76 J	51 J	<100	<100	<100	NA	<100	<100
Silica	NA	NA	<100	4,200	5,890	NA	NA	NA
Silica, Dissolved	19,000	23,600	NA	NA	NA	21,000	24,000	24,000
Sulfate	7,400	7,000	5,500	<5,000	5,900	<5,000	8,600	6,600
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<100	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)	GM-28A					
Top of Screen Depth (ft bls)	210	40	40	40	40	40	40
Sample Date	08/05/05	10/28/98	04/19/99	02/29/00	07/19/00	04/28/04	07/26/05
Sample ID	GWGM-27C (08/05/05)	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)	GWGM28A (072605)
Alkalinity	160,000	350,000	330,000	NA	320,000	380,000	330,000
Ammonia	**96**	NA	NA	NA	NA	NA	<30
Bicarbonate	NA	NA	NA	310,000	NA	NA	NA
Chloride	1,300	50,000	44,000	NA	28,000	18,000	23,000
Chlorides Soluble	NA	NA	NA	49,000	NA	NA	NA
Nitrogen, (Ammonia)	NA	<200	<200	NA	<30	<30	NA
Unionized Ammonia [1]	NA	<7.6	<7.6	NA	<1.14	<1.14	NA
Nitrogen, Nitrate	<50	<100	<100	NA	<50	<50	27 J
Nitrogen, Nitrite	<50	<100	<100	NA	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	<100	<100	NA	NA	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	100	<50	NA
Phosphate	<50	NA	NA	NA	NA	NA	<50
Phosphorus	72 J	<100	<100	NA	NA	<100	<100
Silica	NA	<100	21,000	NA	NA	NA	NA
Silica, Dissolved	15,000	NA	NA	NA	33,000	36,000	28,000
Sulfate	6,800	<5,000	<5,000	NA	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	<5,000	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	NA	<100 J	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A		GM-28B					
Top of Screen Depth (ft bls)	40	40	124.5	124.5	124.5	124.5	124.5	124.5
Sample Date	07/26/05	12/05/06	11/08/98	11/08/98	04/19/99	04/19/99	03/01/00	04/28/04
Sample ID	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B	GWGM-28B (4/28/04)
Alkalinity	330,000	300,000	120,000	120,000	120,000	120,000	NA	150,000
Ammonia	<30	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	110,000	NA
Chloride	23,000	66,000	1,400	1,200	1,200	<1,000	NA	590 B
Chlorides Soluble	NA	NA	NA	NA	NA	NA	<1,000	NA
Nitrogen, (Ammonia)	NA	50	<200	<200	<200	<200	NA	61
Unionized Ammonia [1]	NA	1.9	<7.6	<7.6	<7.6	<7.6	NA	2.32
Nitrogen, Nitrate	31 J	<50	<100	<100	<100	<100	NA	<50
Nitrogen, Nitrite	<50	<50	<100	<100	<100 J	<100 J	NA	<50
Nitrogen, Nitrite and Nitrate	NA	NA	<100	<100	<100	<100	NA	NA
Ortho-Phosphate	NA	<50	NA	NA	NA	NA	NA	<50
Phosphate	<50	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	120	<100	690	<100	<100	NA	<100
Silica	NA	NA	<100	<100	15,000	15,000	NA	NA
Silica, Dissolved	31,000	29,200	NA	NA	NA	NA	NA	24,000
Sulfate	<5,000	<5,000	11,000	11,000	8,100	9,000	NA	9,700
Sulfate Soluble	NA	NA	NA	NA	NA	NA	8,600	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	NA	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)			GM-29				
Top of Screen Depth (ft bls)	124.5	124.5	124.5	55	55	55	55	55
Sample Date	04/28/04	07/26/05	12/05/06	10/09/98	10/09/98	04/16/99	02/29/00	09/10/03
Sample ID	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GMGM-29	GM-29
Alkalinity	150,000	130,000	140,000	400,000	400,000	360,000	NA	260,000
Ammonia	NA	**60**	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	240,000	NA
Chloride	740 B	<1,000	<1,000	4,300	4,300	3,500	NA	2,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	2,800	NA
Nitrogen, (Ammonia)	**61**	NA	**190**	<200	<200	<200	NA	**200**
Unionized Ammonia [1]	2.32	NA	7.22	<7.6	<7.6	<7.6	NA	7.6
Nitrogen, Nitrate	<50	<50	41 J	<100	<100	<100	NA	<50
Nitrogen, Nitrite	<50	<50	<50	<100	<100	<100	NA	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	<100	<100	<100	NA	NA
Ortho-Phosphate	25 B	NA	26 J	NA	NA	NA	NA	<50
Phosphate	NA	<50	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	55 J	<100	<100	<100	NA	<100
Silica	NA	NA	NA	<100	<100	18,000	NA	NA
Silica, Dissolved	24,000	26,000	21,100	NA	NA	NA	NA	32,000
Sulfate	9,800	8,200	8,900	11,000	11,000	<10,000 M	NA	5,600
Sulfate Soluble	NA	NA	NA	NA	NA	NA	<5,000	NA
Sulfide	<1,000	<1,000	3,100	4,200	4,200	<1,000	NA	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29 (continued)			GM-30			GM-31	
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105	105
Sample Date	05/03/04	07/28/05	12/08/06	10/27/98	05/12/99	05/12/99	10/24/98	05/03/99
Sample ID	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31	GWGM-31
Alkalinity	230,000	220,000	290,000	420,000	400,000	400,000	250,000	240,000
Ammonia	NA	**75**	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	1,800	1,400	2,000	63,000	46,000	43,000	40,000	40,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**88**	NA	**190**	<200	<200	<200	<200	<200
Unionized Ammonia [1]	3.34	NA	7.22	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<50	31 J	<250	<100	<100	<100	<200	<100
Nitrogen, Nitrite	<50	<50	<50	<100	<100	<100	<200 JM	<100
Nitrogen, Nitrite and Nitrate	NA	NA	NA	<100	<100	<100	<100	<100
Ortho-Phosphate	<50	NA	<50	NA	NA	NA	NA	NA
Phosphate	NA	<50	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	140	110	<100
Silica	NA	NA	NA	<100	9,900	9,900	<100	19,100
Silica, Dissolved	29,000	29,000	29,200	NA	NA	NA	NA	NA
Sulfate	4,800 B	18,000	<5,000	5,900	230,000	240,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-31 (continued)	GM-32				GM-33	GM-34A	
Top of Screen Depth (ft bls)	105	135	135	135	135	74	30	30
Sample Date	10/09/00	10/25/98	04/27/99	09/25/03	05/26/04	05/10/99	10/08/98	04/17/99
Sample ID	GWGM-31	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-33	GWGM-34A	GWGM-34A
Alkalinity	NA	2,700,000	2,700,000	3,200,000	2,800,000	160,000	160,000	170,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	260,000	NA	NA	NA	NA	NA	NA	NA
Chloride	36,000	<80,000 M	<32,000 M	18,000	17,000	50,000	35,000	45,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	NA	***890***	**300**	***410***	<1,500 *F65	<200	<200	<200
Unionized Ammonia [1]	NA	33.82	11.40	15.58	<57	<7.6	<7.6	<7.6
Nitrogen, Nitrate	NA	<200	<1,000	<50	<50	<100	1,100	560
Nitrogen, Nitrite	NA	<200 M	<1,000 M	<50	27 B	<100	<100	<100 J
Nitrogen, Nitrite and Nitrate	NA	<100	<100	NA	NA	<100	1,100	560
Ortho-Phosphate	NA	NA	NA	<50	46 B	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	NA	670	<100	230	110	1,300	<100	<100
Silica	NA	<100	200,400	NA	NA	14,000	<100	9,500
Silica, Dissolved	NA	NA	NA	80,000	54,000	NA	NA	NA
Sulfate	<5,000	270,000	200,000	140,000	86,000	18,000	17,000	11,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	NA	<25,000 M	9,400	<1,000	<1,000	<1,000	3,400	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A (continued)	GM-34B				GM-35		
Top of Screen Depth (ft bls)	30	85	85	85	85	40	40	40
Sample Date	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04	11/04/98	05/04/99	05/04/99
Sample ID	GWGM-34A (4/29/04)	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-35	GWGM-35	GWGM-84
Alkalinity	170,000	170,000	180,000	180,000	190,000	240,000	280,000	290,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	79,000	18,000	24,000	99,000	98,000	7,100	11,000	11,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**37**	<200	<200	<30	<30	***550***	**250**	**250**
Unionized Ammonia [1]	1.41	<7.6	<7.6	<1.14	<1.14	20.9	9.5	9.5
Nitrogen, Nitrate	1,300	350	550	610	520	<100	<100 J	<100 J
Nitrogen, Nitrite	<50	<100	<100	<50	<50	<100	<100	<100
Nitrogen, Nitrite and Nitrate	NA	350	550	NA	NA	<100	<100	<100
Ortho-Phosphate	<50	NA	NA	<50	36 B	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	120	<100	<100	<100	<100	<100	<100
Silica	NA	<100	14,000	NA	NA	<100	19,300	18,100
Silica, Dissolved	13,000	NA	NA	22,000	18,000	NA	NA	NA
Sulfate	11,000	20,000	12,000	15,000	16,000	510,000	220,000	230,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-36			GM-37A				GM-37B
Top of Screen Depth (ft bls)	95	95	95	144	144	144	144	328
Sample Date	11/03/98	05/05/99	05/04/04	11/18/98	05/11/99	09/25/03	05/17/04	10/13/98
Sample ID	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-37A	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B
Alkalinity	240,000	240,000	250,000	1,300,000	1,100,000	1,100,000	1,100,000	2,200,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	88,000	67,000	120,000	<40,000 M	12,000	8,800	12,000	<40,000 M
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<30	<200	***910***	<30	<300 *F65	***2,700***
Unionized Ammonia [1]	<7.6	<7.6	<1.14	<7.6	34.58	<1.14	<11.4	91.8
Nitrogen, Nitrate	800	630	400	<200	<100 J	<50	<50	<1,000
Nitrogen, Nitrite	<100	<100	<50	<200 M	<100	<50	<50	<1,000 M
Nitrogen, Nitrite and Nitrate	800	630	NA	<100	<100	NA	NA	<200 M
Ortho-Phosphate	NA	NA	<50	NA	NA	<50	<50	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	250	<100	<100	640	2,100	530	540	<100
Silica	<100	9,900	NA	<100	52,000	NA	NA	<100
Silica, Dissolved	NA	NA	16,000	NA	NA	62,000	63,000	NA
Sulfate	10,000	7,000	7,600	<5,000	20,000	<5,000	<5,000	30,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	8,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)			GM-38A			GM-38B	
Top of Screen Depth (ft bls)	328	328	328	95	95	95	160	160
Sample Date	05/14/99	09/25/03	05/27/04	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99
Sample ID	GWGM-37B	GM-37B	GWGM-37B (5/27/04)	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B
Alkalinity	250,000	2,400,000	2,500,000	150,000	160,000	160,000	190,000	180,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	22,000	24,000	24,000	37,000	36,000	23,000	2,500	2,700
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	***330***	<150 *F65	<750 *F65	<200	<200	<200	<200	<200
Unionized Ammonia [1]	12.54	<5.7	<28.5	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<200	<50	<50	1,800	1,800	1,300	<100	<100
Nitrogen, Nitrite	<200 M	<50	<50	<100	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	<100	NA	NA	1,800	1,800	1,300	<100	<100
Ortho-Phosphate	NA	<50	27 B	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	310	<100	75	<100	<100	<100	190	<100
Silica	54,000	NA	NA	<100	<100	11,000	<100	16,100
Silica, Dissolved	NA	58,000	46,000	NA	NA	NA	NA	NA
Sulfate	7,900	<5,000	<5,000	14,000	14,000	13,000	14,000	10,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	7,300	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C			GM-39			GM-40A		
Top of Screen Depth (ft bls)	200	200	200	85	85	85	75	75	75
Sample Date	10/20/98	10/20/98	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04
Sample ID	GWGM-38C	GWGM-97	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)
Alkalinity	160,000	170,000	170,000	190,000	200,000	190,000	68,000	62,000	72,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	3,100	3,100	1,900	29,000	35,000	35,000	2,300	2,000	3,400
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	<200	<200	<200	**43**
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	1.63
Nitrogen, Nitrate	<100	<100	<100	140	<100	<100	<100	<100	<50
Nitrogen, Nitrite	<100	<100	<100	<100	<100	<100	<100	<100	<50
Nitrogen, Nitrite and Nitrate	<100	<100	<100	140	<100	<100	<100	<100	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	25 B
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	<100	<100	<100	<100
Silica	<100	<100	13,900	<100	23,000	22,000	<100	100	NA
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	15,000
Sulfate	13,000	13,000	11,000	7,400	<5,000	<5,000	18,000	16,000	19,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	1,100	<1,000	<1,000	<1,000	1,400	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B			GM-41		GM-42		GM-49	GM-50
Top of Screen Depth (ft bls)	**120**	**120**	**120**	**40**	**40**	**72**	**72**	**83.5**	**80.5**
Sample Date	**10/26/98**	**04/27/99**	**05/19/04**	**10/19/98**	**04/16/99**	**10/20/98**	**04/16/99**	**04/17/99**	**10/14/98**
Sample ID	**GWGM-40B**	**GWGM-40B**	**GWGM-40B (5/19/04)**	**GWGM-41**	**GWGM-41**	**GWGM-42**	**GWGM-42**	**GWGM-49**	**GWGM-50**
Alkalinity	2,400,000	2,300,000	2,600,000	420,000	430,000	340,000	350,000	420,000	360,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	<40,000 M	21,000	24,000	60,000	52,000	47,000	44,000	5,900	130,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**280**	<200	**49**	<200	<200	***360***	***410***	<200	<200
Unionized Ammonia [1]	10.64	<7.6	1.86	<7.6	<7.6	13.68	15.58	<7.6	<7.6
Nitrogen, Nitrate	<200 J	<100	<50	<100	<100	<100	<100	<100	120
Nitrogen, Nitrite	<200 M	<100 J	<50	<100	<100	<100	<100 J	<100 J	<100
Nitrogen, Nitrite and Nitrate	<100	<100	NA	<100	<100	<100	<100	<100	120
Ortho-Phosphate	NA	NA	<50	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	170	<100	91 J	<100	<100	<100	<100	<100	<100
Silica	<100	100	NA	<100	32,000	<100	27,000	14,000	<100
Silica, Dissolved	NA	NA	85,000	NA	NA	NA	NA	NA	NA
Sulfate	100,000	62,000	<5,000	<5,000	<10,000 M	160,000	66,000	55,000	7,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<25,000 M	6,200	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-50 (continued)	GM-51		GM-52	GM-53A	GM-53B		GM-54	
Top of Screen Depth (ft bls)	**80.5**	**67**	**67**	**75**	**79**	**195**	**195**	**80**	**80**
Sample Date	**04/17/99**	**10/20/98**	**04/18/99**	**04/19/99**	**04/19/99**	**11/05/98**	**05/01/99**	**10/24/98**	**05/01/99**
Sample ID	**GWGM-50**	**GWGM-51**	**GWGM-51**	**GWGM-52**	**GWGM-53A**	**GWGM-53B**	**GWGM-53B**	**GWGM-54**	**GWGM-54**
Alkalinity	360,000	170,000	200,000	230,000	200,000	670,000	710,000	92,000	98,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	110,000	7,400	15,000	3,200	45,000	11,000	12,000	<1,000	<1,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	<200	<200	<200	<200
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<100	<100	<100	880	<100	<100	<100	<100	<100
Nitrogen, Nitrite	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Nitrogen, Nitrite and Nitrate	<100	<100	<100	880	<100	<100	<100	<100	<100
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	<100	<100	<100	580
Silica	21,000	<100	15,000	10,000	11,000	<100	28,600	<100	13,600
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	<5,000	110,000	130,000	25,000	5,600	14,000	<5000	28,000	34,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	1,800	1,200	1,200

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-55			GM-56		GM-57	GM-58	GM-59		GM-60
Top of Screen Depth (ft bls)	75	75	75	32	32	76	75	114	114	102
Sample Date	10/24/98	05/01/99	05/01/99	10/21/98	04/20/99	04/20/99	04/26/99	11/17/98	04/28/99	05/12/99
Sample ID	GWGM-55	GWGM-55	GWGM-85	GWGM-56	GWGM-56	GWGM-57	GWGM-58	GWGM-59	GWGM-59	GWGM-60
Alkalinity	310,000	<10,000	330,000	290,000	300,000	260,000	210,000	210,000	210,000	320,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	110,000	76,000	75,000	16,000	25,000	79,000	48,000	34,000	34,000	140,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	<200	<200	<200	<200	<200
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6
Nitrogen, Nitrate	<200	<100	<100	320	<100	<100	1200	<100	130	200
Nitrogen, Nitrite	<200 JM	<100	<100	<100	<100 J	<100 J	<100 J	<100	<100	130
Nitrogen, Nitrite and Nitrate	<100	<100	<100	320	<100	<100	1,200	<100	130	330
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
Silica	<100	21,300	23,300	<100	10,000	21,000	24,740	<100	100	15,000
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	<5,000	<5,000	<5,000	42,000	200,000	6,700	25,000	14,000	11,000	25,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-61	GM-62A		GM-62B			GM-62C	
Top of Screen Depth (ft bls)	**138**	**90**	**90**	**195**	**195**	**195**	**315**	**315**
Sample Date	**05/03/99**	**08/23/99**	**05/11/04**	**08/24/99**	**08/24/99**	**05/19/04**	**08/24/99**	**05/18/04**
Sample ID	**GWGM-61**	**GWGM-62A**	**GWGM-62A (5/11/04)**	**GWGM-62B**	**GWGM-82**	**GWGM-62B (5/19/04)**	**GWGM-62C**	**GWGM-62C (5/18/04)**
Alkalinity	250,000	440,000	480,000	2,000,000	2,000,000	2,000,000	2,100,000	1,300,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	110,000	14,000	13,000	23,000	22,000	24,000	23,000	19,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<150	**100**	**86**	**71**	<150 *F65	<60	***380***
Unionized Ammonia [(1)]	<7.6	<5.7	3.8	3.27	2.7	<5.7	<2.28	14.44
Nitrogen, Nitrate	1,500	<50	<50	<100	<100	<50	<100	<50
Nitrogen, Nitrite	<100 J	<50	<50	<50	<50	27 B	<50	39 J
Nitrogen, Nitrite and Nitrate	1500	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	NA	<50	NA	NA	<50	NA	<50
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	130	250	<100	<100	410	<100	63 J
Silica	<100	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	NA	NA	48,000	NA	NA	75,000	NA	6100
Sulfate	37,000	130,000	200,000	<5,000	<5,000	<5,000	<5,000	100,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<100	<1,000	<100	<100	<1,000	110	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A				GM-63B			GM-64A
Top of Screen Depth (ft bls)	45	45	45	45	105	105	105	33
Sample Date	08/29/00	09/19/00	09/15/03	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00
Sample ID	GWGM-63A	GWGM-63A	GM-63A	GWGM-63A (5/5/04)	GWGM-63B	GM-63B	GWGM-63B (4/27/04)	GWGM-64A
Alkalinity	670,000	650,000	480,000	640,000	130,000	150,000	150,000	640,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	10,000	11,000	5,500	8,600	1,300	1,400	1,500	20,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	<30	<30	<30	**110**	**180**	**44**	<30
Unionized Ammonia [1]	<1.14	<1.14	<1.14	<1.14	4.18	6.84	1.67	<1.14
Nitrogen, Nitrate	<50	<50	<50	3,200	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<50	<50	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	NA	<50	<50	NA	<50	52	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100	<100	<100	<100
Silica	NA	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	36,000	19,000	31,000	31,000	21,000	17,000	15,000	37,000
Sulfate	<5,000	<5,000	<5,000	<5,000	NA	7,100	6,800	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	240 J	280	<1,000	600 B	<1,000	<1,000	<1,000	<100 J

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)			GM-64B				GM-66A	
Top of Screen Depth (ft bls)	33	33	33	117	117	117	117	27	27
Sample Date	10/03/00	09/08/03	05/04/04	07/24/00	10/04/00	09/08/03	05/11/04	07/18/00	09/16/03
Sample ID	GWGM-64A	GM-64A	GWGM-64A (5/4/04)	GWGM-64B	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A
Alkalinity	480,000	490,000	660,000	720,000	NA	820,000	850,000	320,000	350,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	780,000	NA	NA	NA	NA
Chloride	19,000	24,000	25,000	9,100	7,300	8,600	9,700	110,000	130,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	**35**	<30	<30	NA	**42**	29 B	<30	**55**
Unionized Ammonia [1]	<1.14	1.33	<1.14	<1.14	NA	1.6	1.1	<1.14	2.09
Nitrogen, Nitrate	190	<50	<50	<50	NA	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<50	<50	NA	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	<50	<50	190	NA	<50	<50	74	<50
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	52 B	NA	NA	<100	89 J	NA	<100
Silica	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	37,000	35,000	41,000	28,000	NA	36,000	34,000	26,000	31,000
Sulfate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	100	<1,000	<1,000	<100 J	NA	<1,000	<1,000	<100 J	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A (continued)		GM-66B				
Top of Screen Depth (ft bls)	27	27	125	125	125	125	125
Sample Date	04/27/04	07/27/05	07/19/00	08/03/00	09/11/03	09/11/03	05/10/04
Sample ID	GWGM-66A (4/27/04)	GWGM66A (072705)	GWGM-66B	GMGW-66B	GM-66B	GM-66B (09/11/03)	GWGM-66B (5/10/04)
Alkalinity	380,000	370,000	690,000	780,000	740,000	NA	710,000
Ammonia	NA	**35**	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA
Chloride	140,000	150,000	14,000	14,000 J	17,000	NA	19,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**45**	NA	<30	**32**	**250**	NA	**30**
Unionized Ammonia [1]	1.71	NA	<1.14	1.22	9.5	NA	1.14
Nitrogen, Nitrate	<50	52	<50	<50	<50	NA	34 B
Nitrogen, Nitrite	<50	<50	<50	<50	<50	NA	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	<50	NA	180	210	<50	NA	<50
Phosphate	NA	<50	NA	NA	NA	NA	NA
Phosphorus	<100	<100	NA	NA	<100	NA	160
Silica	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	28,000	24,000	43,000	43,000	NA	48,000	46,000
Sulfate	<5,000	<5,000	<5,000	<5,000	<5,000	NA	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	310 J	200	<1,000	NA	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)		GM-67	GM-68		GM-70	GM-71	GM-72	
Top of Screen Depth (ft bls)	125	125	122	140	140	42	39	43	43
Sample Date	07/27/05	12/08/06	08/07/00	08/31/00	09/26/00	08/17/00	08/21/00	08/22/00	09/24/03
Sample ID	GWGM66B (072705)	GWGM-66B (12/8/06)	GWGM-67	GWGM-68	GWGM-68	GWGM-70	GWGM-71	GWGM-72	GM-72
Alkalinity	680,000	470,000	360,000	160,000	170,000	370,000	140,000	1,000,000	1,300,000
Ammonia	**59**	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	20,000	57,000	23,000	39,000	34,000	5,200 J	8,100 J	200,000	210,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	NA	**91**	**42**	<30	<30	**150**	**140**	**62**	***680***
Unionized Ammonia [1]	NA	3.46	1.6	<1.14	<1.14	5.7	5.32	2.36	25.84
Nitrogen, Nitrate	33 J	<250	<50	3,000 J	3,700	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<50	<50	<50	<50	<50	<50	88
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	<50	NA	NA	NA	200	NA	NA	910
Phosphate	<50	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	94 J	67 J	<100	<100	<100	NA	<100	780	1,800
Silica	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	30,000	39,800	30,000	12,000	12,000	36,000	28,000	44,000	53,000
Sulfate	<5,000	<5,000	<5,000	20,000	13,000	160,000	220,000	360,000	280,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	2,000	<1,000	<100 J	<100	<100	<100 J	7,800 J	4,400

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-72 (continued)		GM-72A		GM-73		GM-74	GM-75
Top of Screen Depth (ft bls)	43	43	46	46	42	42	34	24
Sample Date	01/05/04	04/16/04	07/25/05	12/12/06	09/06/00	09/06/00	09/07/00	09/08/00
Sample ID	GWGM-72	GM-72	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)	GMGW-73	GWGM-73	GWGM-74	GWGM-75
Alkalinity	1,300,000	1,200,000	1,900,000	1,500,000	NA	390,000	180,000	130,000
Ammonia	NA	NA	**280**	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	190,000	260,000	46,000	290,000	NA	59,000	2,400	4,500
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	***16,000***	***430***	NA	**290**	NA	<30 J	<30	**55**
Unionized Ammonia [1]	608	16.34	NA	11.02	NA	<1.14	<1.14	2.09
Nitrogen, Nitrate	700	<50	<500	<50	NA	4,900	<50	<50
Nitrogen, Nitrite	82	<50	<50	<50	NA	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	820	1200	NA	660	NA	NA	NA	NA
Phosphate	NA	NA	820	NA	NA	NA	NA	NA
Phosphorus	2,000	1,400	1,600	1,500	NA	<100	<100	<100
Silica	NA	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	47,000	50,000	47,000	21,000	16,000	NA	19,000	9,000
Sulfate	320,000	410,000	<5,000	190,000	NA	280,000	16,000	12,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	6,800	9,700	21,000	15,000	NA	<100 J	<100 J	<100 J

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-77			GM-78		
Top of Screen Depth (ft bls)	105	105	105	20	20	20
Sample Date	09/22/03	05/11/04	07/28/05	09/18/03	04/29/04	07/29/05
Sample ID	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)
Alkalinity	710,000	630,000	680,000	390,000	400,000	410,000
Ammonia	NA	NA	<30	NA	NA	**41**
Bicarbonate	NA	NA	NA	NA	NA	NA
Chloride	19,000	25,000	24,000	120,000	82,000	120,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**62**	<30	NA	**46**	<30	NA
Unionized Ammonia [(1)]	2.36	<1.14	NA	1.75	<1.14	NA
Nitrogen, Nitrate	<50	<50	50	<50	<50	47 J
Nitrogen, Nitrite	<50	<50	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	NA	<50	<50	NA
Phosphate	NA	NA	<50	NA	NA	<50
Phosphorus	<100	85 J	150	<100	<100	100
Silica	NA	NA	NA	NA	NA	NA
Silica, Dissolved	37,000	32,000	33,000	32,000	32,000	19,000
Sulfate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78		GM-79			
Top of Screen Depth (ft bls)	20	20	25	25	25	25
Sample Date	07/29/05	12/08/06	09/18/03	04/26/04	07/29/05	12/04/06
Sample ID	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)
Alkalinity	420,000	330,000	360,000	380,000	380,000	240,000
Ammonia	24 J	NA	NA	NA	<30	NA
Bicarbonate	NA	NA	NA	NA	NA	NA
Chloride	120,000	78,000	10,000	12,000	12,000	26,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	NA	**100**	**57**	<30	NA	**230**
Unionized Ammonia [1]	NA	3.8	2.17	<1.14	NA	8.74
Nitrogen, Nitrate	<50	<250	<50	<50	95	59
Nitrogen, Nitrite	<50	<50	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	<50	<50	<50	NA	
Phosphate	<50	NA	NA	NA	<50	NA
Phosphorus	70 J	<100	<100	54 J	80 J	<100
Silica	NA	NA	NA	NA	NA	NA
Silica, Dissolved	30,000	32,500	37,000	32,000	28,000	27,600
Sulfate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000	1,300

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-82A		GM-84		
Top of Screen Depth (ft bls)	82	82	77	77	77
Sample Date	06/02/04	06/05/04	08/19/04	08/01/05	12/12/06
Sample ID	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)
Alkalinity	320,000	790,000	250,000	290,000	230,000
Ammonia	NA	NA	NA	<30	NA
Bicarbonate	NA	NA	NA	NA	NA
Chloride	37,000	26,000	35,000	42,000	46,000
Chlorides Soluble	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	<30	<30	NA	**33**
Unionized Ammonia [1]	<1.14	<1.14	<1.14	NA	1.25
Nitrogen, Nitrate	<50	<50	<50	<50	<50 H
Nitrogen, Nitrite	<50	26 B	<50	<50	<50 H
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA
Ortho-Phosphate	<50 ZZ	<50	<50	NA	<50
Phosphate	NA	NA	NA	<50	NA
Phosphorus	250	<100	110	81 J	53 J
Silica	NA	NA	NA	NA	NA
Silica, Dissolved	25,000	45,000	11,000	16,000	14,100
Sulfate	<5,000	<5,000	46,000	44,000	39,000
Sulfate Soluble	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	1,700

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-87A		GM-87B	GM-118D		GMSB-111[2]
Top of Screen Depth (ft bls)	32	32	117	54	54	--
Sample Date	12/05/06	12/05/06	12/05/06	10/21/98	04/29/99	08/19/03
Sample ID	GWGM-87A (12/5/06)	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D	GBGWGMSB-111/26
Alkalinity	330,000	330,000	150000	250,000	250,000	350,000
Ammonia	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA
Chloride	33,000	33,000	560 J	35,000	37,000	17,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	**49**	**82**	19 J	<200	<200	67
Unionized Ammonia [1]	1.86	3.12	0.72	<7.6	<7.6	2.55
Nitrogen, Nitrate	260	390	32 J	4,500	4,300	1,400
Nitrogen, Nitrite	<50	<50	<50	<100	<100	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	4,500	4,300	NA
Ortho-Phosphate	<50 H	<50 H	240	NA	NA	<50
Phosphate	NA	NA	NA	NA	NA	NA
Phosphorus	86 J	82 J	270	<100	<100	<100
Silica	NA	NA	NA	<100	9,800	NA
Silica, Dissolved	25,900	26,500	19000	NA	NA	17,000
Sulfate	<5,000	<5,000	5000	12,000	8,900	27,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA
Sulfide	1,100	<1,000	<1000	<1,000	1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-112[2]		GMSB-113[2]		
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/03/03	09/03/03	09/05/03	09/05/03	09/04/03
Sample ID	GBGWGMSB-112/134	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27
Alkalinity	1,700,000	180,000	1,300,000	190,000	370,000
Ammonia	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA
Chloride	20,000	5,300	16,000	13,000	72,000
Chlorides Soluble	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	31	<30	49	52
Unionized Ammonia [1]	<1.14	1.18	<1.14	1.86	1.98
Nitrogen, Nitrate	<50	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	<50	<50	<50
Phosphate	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100
Silica	NA	NA	NA	NA	NA
Silica, Dissolved	46,000	18,000	48,000	18,000	30,000
Sulfate	<5,000	5,200	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-116[2]		GMSB-117[2]		GMSB-118[2]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/12/03	08/11/03	08/14/03	08/15/03	08/16/03
Sample ID	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25
Alkalinity	690,000	250,000	770,000	210,000	1,200,000
Ammonia	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA
Chloride	8,200	4,900	14,000	17,000	11,000
Chlorides Soluble	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	92	<30	<30	<30	<30
Unionized Ammonia [1]	3.5	<1.14	<1.14	<1.14	<1.14
Nitrogen, Nitrate	<50	<50	<50	<50	<50
Nitrogen, Nitrite	<50	<50	<50	<50	<50
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	<50	<50	<50
Phosphate	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	<100
Silica	NA	NA	NA	NA	NA
Silica, Dissolved	33,000	23,000	23,000	38,000	39,000
Sulfate	<5,000	<5,000	<5,000	<5,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	<1,000

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-119[2]		GMSB-122[2]	GMSB-123[2]	MPMW-4	MW-1B
Top of Screen Depth (ft bls)	--	--	--	--	--	86
Sample Date	08/18/03	08/17/03	09/08/03	09/09/03	02/26/02	06/27/97
Sample ID	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150	GWMPMW-4 (2/26/02)	GWMW-1B
Alkalinity	420,000	310,000	1,900,000	1,000,000	140,000	280,000
Ammonia	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA
Chloride	51,000	63,000	21,000	15,000	2,700	55,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<30	<30	<30	<30	<88	<200
Unionized Ammonia [1]	<1.14	<1.14	<1.14	<1.14	<3.34	<7.6
Nitrogen, Nitrate	<50	260	<50	<50	190	<100
Nitrogen, Nitrite	<50	<50	<50	<50	<50	<100
Nitrogen, Nitrite and Nitrate	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	<50	<50	<50	<50	67	NA
Phosphate	NA	NA	NA	NA	NA	NA
Phosphorus	<100	<100	<100	<100	82 B	700
Silica	NA	NA	NA	NA	NA	29,000
Silica, Dissolved	27,000	22,000	40,000	51,000	16,000	NA
Sulfate	<5,000	<5,000	<5,000	<5,000	18,000	<5,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA
Sulfide	<1,000	<1,000	<1,000	<1,000	NA	2,200

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-2B	MW-5		MW-8					MW-9A	MW-10
Top of Screen Depth (ft bls)	102	83	83	133	133	133	133	133	57	95
Sample Date	06/28/97	10/22/98	04/30/99	06/29/97	06/29/97	10/24/98	05/03/99	05/12/04	07/02/97	06/30/97
Sample ID	GWMW-2B	GWMW-5	GWMW-5	GWGM-99	GWMW-8	GWMW-8	GWMW-8	GWMW-8 (5/12/04)	GWMW-9A	GWMW-10
Alkalinity	240,000	150,000	150,000	820,000	840,000	770,000	760,000	660,000	130,000	250,000
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	24,000	14,000	14,000	6,000	6,000	5,300	5,300	4,700	19,000	82,000
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	<200	<200	<200	<200	<200	<200	<200	<30	<200	<200
Unionized Ammonia [1]	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<7.6	<1.14	<7.6	<7.6
Nitrogen, Nitrate	<100 J	<100	<100	<100	<100	<200	<100	<50	<100	1,100
Nitrogen, Nitrite	<100 J	<100	<100	<100	<100	<200 M	<100	<50	<100	<100
Nitrogen, Nitrite and Nitrate	NA	<100	<100	NA	NA	<100	<100	NA	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	<50	NA	NA
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phosphorus	<100	100	<100	200	200	130	<100	<100	100	<100
Silica	33,000	<100	11,100	52,000	29,000	<100	34,500	NA	16,000	7,500
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	37,000	NA	NA
Sulfate	<5,000	12,000	7,800	20,000	20,000	<5,000	32,000	<5,000	21,000	26,000
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfide	2,500	<1,000	<1,000	6,300	8,000	2,200	1,400	<1,000	2,000	2,500

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Table 4-11: Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-2			UG-4				UG-6	Residential
Top of Screen Depth (ft bls)	48	48	48	103	103	103	103	236	Direct
Sample Date	07/01/97	10/27/98	05/03/99	10/13/97	10/13/97	10/23/98	05/02/99	10/21/97	Contact
Sample ID	GWUG-2	GWUG-2	GWUG-2	GM-79	UG-4	GWUG-4	GWUG-4	UG-6	Criteria
Alkalinity	270,000	270,000	280,000	220,000	220,000	210,000	220,000	250,000	--
Ammonia	NA	NA	NA	NA	NA	NA	NA	NA	--
Bicarbonate	NA	NA	NA	NA	NA	NA	NA	NA	--
Chloride	43,000	46,000	57,000	71,000	74,000	66,000	62,000	42,000	ID
Chlorides Soluble	NA	NA	NA	NA	NA	NA	NA	NA	ID
Nitrogen, (Ammonia)	<200	<200	<200	***700***	***600***	***460***	***440***	<200	ID
Unionized Ammonia [1]	<7.6	<7.6	<7.6	26.6	22.8	17.48	16.72	<7.6	--
Nitrogen, Nitrate	1,800	2,200	2,100	<100	<100	<200	<100	<100	310,000,000 (B,N)
Nitrogen, Nitrite	<100	<100	<100 J	<100	<100	<200 MJ	<100	<100	(B,N) ID
Nitrogen, Nitrite and Nitrate	NA	2,200	2,100	NA	NA	<100	<100	NA	--
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	--
Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	--
Phosphorus	<100	<100	<100	300	500	<100	<100	200	(total),ID
Silica	25,000	<100	<100	17,000	16,000	<100	12,700	16,000	--
Silica, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	--
Sulfate	22,000	17,000	15,000	10,000	10,000	7,400	7,800	14,000	ID
Sulfate Soluble	NA	NA	NA	NA	NA	NA	NA	NA	ID
Sulfide	1,800	<1,000	<1,000	<500	650	1,100	<1,000	520	--

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring Top of Screen Depth (ft bls) Sample Date Sample ID	Residential Indoor Air Criteria	Residential Drinking Water Criteria	Final Acute Value Criteria	Final Chronic Value Criteria	Groundwater Surface Water Interface Criteria
Alkalinity	--	--	--	--	--
Ammonia	--	--	320	29	--
Bicarbonate	--	--	--	--	--
Chloride	NLV	250,000 E	--	--	50,000 FF
Chlorides Soluble	NLV	250,000 E	--	--	50,000 FF
Nitrogen, (Ammonia)	3,200,000	10,000 N	320	29	CC
Unionized Ammonia [1]	--	--	--	--	29
Nitrogen, Nitrate	(B,N) NLV	10,000 (B,N) A,N	--	--	--
Nitrogen, Nitrite	(B,N) NLV	1,000 (B,N) A,N	--	--	--
Nitrogen, Nitrite and Nitrate	--	--	--	--	--
Ortho-Phosphate	--	--	--	--	--
Phosphate	--	--	--	--	--
Phosphorus	(total),NLV	63,000 (total)	--	--	1,000 (total),EE
Silica	--	--	--	--	--
Silica, Dissolved	--	--	--	--	--
Sulfate	NLV	250,000 E	--	--	--
Sulfate Soluble	NLV	250,000 E	--	--	--
Sulfide	--	--	--	--	--

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Table 4-11. Summary of Inorganics Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results in micrograms per liter (µg/L).

<	Less than detection limit.
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
ft bls	Feet below land surface.
--	Not applicable.
Italics	Indicates a value above the Final Acute Value Criteria (Michigan Act 451, Part 4, Rule 57, December 11, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
*F65	Elevated detection limits were reported due to sample matrix interference which required sample or extract dilution.
*F70	Received and analyzed outside hold time criteria per client request.
B	Constituent was also detected in laboratory blank.
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 451, Part 4, Rule 57, December 11, 2006).
(1)	Unionized ammonia concentration based on the percentage of total ammonia in the groundwater that will become ammonia in the surface water. Unionized ammonia equals 3.8% of total ammonia in groundwater.
(2)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
J	Estimated result.
NA	Not analyzed.
M	Matrix interference reported by laboratory.
ZZ	Due to analyst error, sample was analyzed outside of hold time.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

A	State of Michigan Drinking Water Standard.
B	Background may be substituted if higher than the calculated cleanup criteria.
CC	Criterion based on the toxicity on unionized ammonia.
E	Criterion is the aesthetic drinking water value.
EE	Applicable criteria established as required by Section 20120a(15) of the act.
FF	The chloride groundwater surface water interface criteria is 125 milligrams per liter (mg/L) when discharged to surface waters designated as public water supply sources or 50 mg/L when discharged to Great Lakes or connecting waters.
ID	Inadequate data to develop criterion.
N	Concentrations of all potential nitrate-nitrogen sources must be added together and compared to nitrate criteria.
NLV	Chemical is not likely to volatilize under most soil conditions.
Total	Criterion established for total metal concentration only.

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	CW-1		GM-1			GM-2B			GM-2C	
Top of Screen Depth (ft bls)	130	130	220	220	220	271	271	271	64	64
Sample Date	10/22/98	04/29/99	10/07/98	04/16/99	04/28/04	11/22/98	04/16/99	05/25/04	11/06/98	04/13/99
Sample ID	GWCW-1	GWCW-1	GWGM-1	GWGM-1	GWGM-1 (4/28/04)	GWGM-2B	GWGM-2B	GWGM-2B(5/25/04)	GWGM-2C	GWGM-2C
Alcohols										
2-Pentanone	NA	NA	NA	NA	<1,000	NA	NA	<1,000	NA	NA
Ethanol	<1,000	<1,000	<1,000	4,600 J	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000	<20,000	<20,000 J	<5,000	47,000 J	<20,000 J	<5,000	<20,000	<20,000 J
Isobutanol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	2,100 J	800 J	<1,000	<1,000
Methanol	<800	<800	<800	<800	290 J	<800 J	<800 J	780 J	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
n-Propanol	NA	R	NA	R	<1,000	NA	R	<1,000	NA	R
Tert-Butyl Alcohol	NA	R	NA	R	<1,000	NA	R	<1,000	NA	R
Aldehydes										
Acetaldehyde	<100 J	<100	<100 J	210	<100	<100 J	460	<100	<100 J	NA
Butanal	<100 J	<100	<100 J	<100	<100	1,600 J	<100	1,900	<100 J	NA
Crotonaldehyde	<100 J	<100	110 J	<100	<100	<100 J	<100	54 J	<100 J	NA
Cyclohexanone	<100 J	<100	<100 J	<100	<100	<100 J	500	1400	<100 J	NA
Decanal	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100	<100 J	NA
Formaldehyde	<100 J	<100	<100 J	<100	<100	120 J	<100	<100	<100 J	NA
Heptanal	<100 J	<100	<100 J	<100	30 J	<100 J	<100	<100	<100 J	NA
Hexanal	<100 J	<100	<100 J	<100	84 J	<100 J	<100	<100	<100 J	NA
m-Tolualdehyde	<100 J	<100	200 J	<100	<100	460 J	<100	1,700	<100 J	NA
Nonanal	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100	<100 J	NA
Octanal	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100	<100 J	NA
Paraldehyde	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100	NA
Pentanal	<100 J	<100	<100 J	<100	<100	200 J	<100	<100	<100 J	NA
Propanal	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100	<100 J	NA
Organic Acids										
Acetic Acid	750	<500	9,600	<500	2,000	1,400,000	2,600,000	260,000 B	<650	<500
Ethylacetate	NA	NA	NA	NA	<5,000	NA	NA	1,600 J	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2C (continued)	GM-3A			GM-3B				GM-4
Top of Screen Depth (ft bls)	64	74	74	74	170	170	170	170	76
Sample Date	05/04/04	10/09/98	04/13/99	05/05/04	10/08/98	04/17/99	04/17/99	05/11/04	10/20/98
Sample ID	GWGM-2C (5/4/04)	GWGM-3A	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GWGM-3B	GWGM-88	GWGM-3B (5/11/04)	GWGM-4
Alcohols									
2-Pentanone	<1,000	NA	NA	<1,000	NA	NA	NA	<1,000	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<20,000	<20,000 J	<5,000	<20,000	<20,000 J	<20,000 J	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	6,800 J	<1,000	<1,000	<1,000
Methanol	640 J	<800	<800	520 J	<800	<800 J	<800 J	1,100	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000
n-Propanol	<1,000	NA	R	<1,000	NA	R	R	<1,000	NA
Tert-Butyl Alcohol	<1,000	NA	R	1,000	NA	R	R	<1,000	NA
Aldehydes									
Acetaldehyde	<100	<100 J	<100	<100	<100 J	100	170	<100	<100 J
Butanal	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Crotonaldehyde	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Cyclohexanone	<100	<100 J	<100	<100	520 J	320	400	1000	<100 J
Decanal	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Formaldehyde	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Heptanal	<100	<100 J	<100	<100	<100 J	<100	<100	75 J	<100 J
Hexanal	<100	<100 J	<100	<100	190 J	<100	<100	<100	<100 J
m-Tolualdehyde	<100	<100 J	<100	<100	880 J	<100	<100	1400	<100 J
Nonanal	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Octanal	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Paraldehyde	<100	<100 J	<100	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100 J	<100	<100	<100 J	<100	<100	160	<100 J
Propanal	<100	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J
Organic Acids									
Acetic Acid	210 I	<200	<500	<500	100,000	3,000	9,800	2,600	220
Ethylacetate	<5,000	NA	NA	<5,000	NA	NA	NA	<5,000	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-4 (continued)	GM-5		GM-6			GM-7			
Top of Screen Depth (ft bls)	76	250	250	165	165	165	145	145	145	145
Sample Date	04/21/99	04/18/99	11/30/99	10/10/98	04/19/99	07/19/00	10/23/98	05/01/99	09/23/03	05/03/04
Sample ID	GWGM-4	GWGM-5	GM-5	GWGM-6	GWGM-6	GWGM-6	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)
Alcohols										
2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	<1,000	<1,000
Ethanol	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000 J	NA	<20,000	<20,000 J	NA	<20,000	<20,000 J	<5,000	<5,000
Isobutanol	<1,000 J	<1,000 J	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000 J	<1,000 J	NA	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Methanol	<800	<800 J	NA	<800	<800	<1,000	<800	<800	<1,000	910 J
n-Butanol	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	R	R	NA	NA	R	<1,000	NA	R	<1,000	<1,000
Tert-Butyl Alcohol	R	R	NA	NA	R	<1,000	NA	R	<1,000	<1,000
Aldehydes										
Acetaldehyde	<100	320	140	<100 J	130	<100 J	<100 J	<100	<100	<100
Butanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Decanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Formaldehyde	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Heptanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Hexanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Nonanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Octanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Paraldehyde	<100	<100	<100	<100 J	<100	<100	<100 J	<100	<100	<100
Pentanal	<100	130	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Propanal	<100	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100	<100
Organic Acids										
Acetic Acid	<500	500	<1,000	<1,000	<500	<500	410	<500	<1,000	<500
Ethylacetate	NA	NA	NA	NA	NA	<5,000	NA	NA	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8			GM-9						
Top of Screen Depth (ft bls)	79	79	79	164	164	164	164	164	164	164
Sample Date	10/09/98	04/13/99	10/21/99	10/11/98	10/11/98	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05
Sample ID	GWGM-8	GWGM-8	GM-8	GWGM-9	GWGM-9MS	GWGM-9MSD	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)
Alcohols										
2-Pentanone	NA	NA	NA	NA	NA	NA	NA	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000 J	NA	NA	R	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000 J	NA	<20,000 J	NA	NA	R	<5,000	<5,000	<10,000
Isobutanol	<1,000	<1,000	<1,000	<1,000 J	NA	NA	R	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000 J	NA	NA	R	<1,000	<1,000	<1,000
Methanol	<800	<800	<1,000	<800 J	NA	NA	R	<1,000	790 J	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000 J	NA	NA	R	60,000	<1,000	<1,000
n-Propanol	NA	R	91 J	NA	NA	NA	R	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	NA	R	<1,000	NA	NA	NA	R	<1,000	<1,000	<1,000
Aldehydes										
Acetaldehyde	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Butanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Crotonaldehyde	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Cyclohexanone	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Decanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Formaldehyde	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Heptanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Hexanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
m-Tolualdehyde	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Nonanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Octanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Paraldehyde	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Pentanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Propanal	<100 J	<100	<100	<100 J	NA	NA	<100	<100	<100	<100
Organic Acids										
Acetic Acid	<200	11,000	<5,000	240	<200	1,200	<500	<1,000	<500	300 J
Ethylacetate	NA	NA	<5,000	NA	NA	NA	NA	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-10		GM-12			GM-13		GM-14		GM-15	
Top of Screen Depth (ft bls)	170	170	290	290	290	325	325	135	135	165	165
Sample Date	11/06/98	04/27/99	10/10/98	10/11/98	04/19/99	04/20/99	05/18/04	10/28/98	05/02/99	10/11/98	04/20/99
Sample ID	GWGM-10	GWGM-10	GWGM-12	GWGM-12	GWGM-12	GWGM-13	GWGM-13 (5/18/04)	GWGM-14	GWGM-14	GWGM-15	GWGM-15
Alcohols											
2-Pentanone	NA	NA	NA	NA	NA	NA	<1,000	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000	<20,000	NA	<20,000 J	<20,000 J	<5,000	<20,000	<20,000 J	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<800	<800	<800	NA	<800 J	<800	1,200	<800	<800	<800	<800
n-Butanol	<1,000	<1,000	<1,000	NA	<1,000 J	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	NA	R	NA	NA	R	R	<1,000	NA	R	NA	R
Tert-Butyl Alcohol	NA	R	NA	NA	R	R	<1,000	NA	R	NA	R
Aldehydes											
Acetaldehyde	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Butanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Crotonaldehyde	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Cyclohexanone	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Decanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Formaldehyde	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Heptanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Hexanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
m-Tolualdehyde	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Nonanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Octanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Paraldehyde	<100	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Pentanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Propanal	<100 J	<100	<100 J	NA	<100	<100	<100	<100	<100	<100 J	<100
Organic Acids											
Acetic Acid	<200	<500	NA	410	<500	18,000	15,000	<200	<500	300	<500
Ethylacetate	NA	NA	NA	NA	NA	NA	<5,000	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)		GM-16				GM-17		GM-18
Top of Screen Depth (ft bls)	165	165	108	108	108	108	224.3	224.3	50
Sample Date	05/10/04	05/10/04	10/09/98	04/14/99	09/23/03	04/27/04	10/12/98	04/26/99	11/07/98
Sample ID	GWGM-15 (5/10/04)	GWGM-996 (5/10/04)	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)	GWGM-17	GWGM-17	GWGM-18
Alcohols									
2-Pentanone	<1,000	<1,000	NA	NA	<1,000	<1,000	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<5,000	<20,000	<20,000 J	<5000	<5000	<20,000	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	700 J	670 J	<800	<800	<1,000	350 J	2,500	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	NA	R	<1,000	<1,000	NA	R	NA
Tert-Butyl Alcohol	<1,000	<1,000	NA	R	<1,000	<1,000	NA	R	NA
Aldehydes									
Acetaldehyde	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Butanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Crotonaldehyde	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Cyclohexanone	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Decanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Formaldehyde	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Heptanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Hexanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
m-Tolualdehyde	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Nonanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Octanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Paraldehyde	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Pentanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Propanal	<100	<100	<100 J	<100	<100	<100	<100 J	<100	<100 J
Organic Acids									
Acetic Acid	<500	240 J	<200	<500	<1,000	<500	650	<500	NA
Ethylacetate	<5,000	<5,000	NA	NA	<5,000	<5,000	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-21	GM-22		GM-23			GM-24A		GM-24B
Top of Screen Depth (ft bls)	5	6	6	3.5	3.5	3.5	71	71	104
Sample Date	10/13/98	10/10/98	04/13/99	10/10/98	05/12/04	05/12/04	11/09/98	05/04/99	11/17/98
Sample ID	GWGM-21	GWGM-22	GWGM-22	GWGM-23	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)	GWGM-24A	GWGM-24A	GWGM-24B
Alcohols									
2-Pentanone	NA	NA	NA	NA	<1,000	<1,000	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J
Ethylene glycol	<20,000	<20,000	<20,000 J	<20,000	<5,000	<5,000	<20,000	<20,000	<20,000 J
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J
Methanol	<800	<800	<800	<800	940 J	820 J	<800	<800	<800 J
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J
n-Propanol	NA	NA	R	NA	<1,000	<1,000	NA	R	NA
Tert-Butyl Alcohol	NA	NA	R	NA	<1,000	<1,000	NA	R	NA
Aldehydes									
Acetaldehyde	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Butanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Crotonaldehyde	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Cyclohexanone	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Decanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Formaldehyde	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Heptanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Hexanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
m-Tolualdehyde	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Nonanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Octanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100 J	<500	<100	<100	<100	<100
Pentanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Propanal	<100	<100 J	<100	<100 J	<100	<100	<100 J	<100	<100
Organic Acids									
Acetic Acid	<200	210	<500	<200	<500	<500	1,300	<500	<200
Ethylacetate	NA	NA	NA	NA	<5,000	<5,000	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24B (continued)				GM-24C				
Top of Screen Depth (ft bls)	104	104	104	104	193	193	193	193	193
Sample Date	11/17/98	05/05/99	04/29/04	05/04/04	11/20/98	11/20/98	05/13/99	######	04/29/04
Sample ID	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24B (5/4/04)	GWGM-24C	GWGM-93	GWGM-24C	GM-24C	GWGM-24C (4/29/04)
Alcohols									
2-Pentanone	NA	NA	<1,000	NA	NA	NA	NA	<1,000	<1,000
Ethanol	<1,000 J	<1,000	<1,000	NA	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Ethylene glycol	<20,000 J	<20,000	1,200 J	NA	<20,000 J	<20,000 J	<20,000	<5,000	1,500 J
Isobutanol	<1,000 J	<1,000	<1,000	NA	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Isopropanol	<1,000 J	<1,000	<1,000	NA	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Methanol	<800 J	<800	430 J	NA	<800 J	<800 J	<800	<1,000	320 J
n-Butanol	<1,000 J	<1,000	<1,000	NA	1,200 J	3,100 J	<1,000	<1,000	<1,000
n-Propanol	NA	R	<1,000	NA	NA	NA	R	<1,000	<1,000
Tert-Butyl Alcohol	NA	R	<1,000	NA	NA	NA	R	<1,000	<1,000
Aldehydes									
Acetaldehyde	<100	<100	NA	<100	<100	<100	<100	<100	<100
Butanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	NA	<100	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100	NA	<100	<100	<100	<100	<100	<100
Decanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Formaldehyde	<100	<100	NA	<100	<100	<100	<100	<100	<100
Heptanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Hexanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	NA	<100	<100	<100	<100	<100	<100
Nonanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Octanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Paraldehyde	<100	<100	NA	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Propanal	<100	<100	NA	<100	<100	<100	<100	<100	<100
Organic Acids									
Acetic Acid	320	<500	<500	NA	1,000	6,600	1,300	<1,000	<500
Ethylacetate	NA	NA	<5,000	NA	NA	NA	NA	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25A					GM-25B				
Top of Screen Depth (ft bls)	19	19	19	19	19	98	98	98	98	98
Sample Date	10/06/98	04/16/99	######	######	05/12/04	10/06/98	04/27/99	10/20/99	09/09/03	05/18/04
Sample ID	GWGM-25A	GWGM-25A	GM-25A	GM-25A	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GM-25B	GM-25B	GWGM-25B (5/18/04)
Alcohols										
2-Pentanone	NA	NA	NA	<1,000	<1,000	NA	NA	NA	<1,000	<1,000
Ethanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<50,000	58 J	<1,000	<1,000
Ethylene glycol	<20,000	<20,000 J	NA	<5,000	<5,000	**290,000**	<20,000	NA	12,000	3,400 J
Isobutanol	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000	<50,000	42 J	<1,000	<1,000
Isopropanol	<1,000	<1,000 J	NA	<1,000	<1,000	2,400	**360,000 J**	790 J	<1,000	960 J
Methanol	<800	<800	NA	<1,000	2,000	<800	<50,000	<1,000	<1,000	920 J
n-Butanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<50,000	110 J	44,000	<1,000
n-Propanol	NA	R	NA	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	NA	R	NA	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Aldehydes										
Acetaldehyde	120 J	**420**	**250**	<100	<100	**1,200 J**	**2,000**	**2,200**	<100	**890**
Butanal	<100 J	<100	<100	<100	<100	1,500 J	<500	<500	<100	<100
Crotonaldehyde	<100 J	<100	<100	<100	<100	<100 J	<500	<500	<100	<100
Cyclohexanone	<100 J	<100	<100	<100	61 J	160 J	940	520	510	<100
Decanal	<100 J	<100	<100	<100	<100	<100 J	<500	<500	<100	<100
Formaldehyde	<100 J	<100	<100	<100	<100	**220 J**	<500	<500	<100	<100
Heptanal	<100 J	<100	<100	<100	58 J	<100 J	<500	<500	<100	140
Hexanal	140 J	<100	<100	<100	<100	<100 J	<500	640	<100	<100
m-Tolualdehyde	300 J	<100	<100	<100	120	560 J	<500	1100	1400	<100
Nonanal	<100 J	<100	<100	<100	<100	<100 J	<500	<500	<100	<100
Octanal	<100 J	<100	<100	<100	<100	<100 J	<500	<500	<100	130
Paraldehyde	<100	<100	<100	<100	<500	<100 J	<100	<100	<100	<500
Pentanal	<100 J	120	<100	<100	79 J	<100 J	<500	550	<100	<100
Propanal	<100 J	<100	<100	<100	<100	120 J	<500	<500	<100	<100
Organic Acids										
Acetic Acid	<1,000	<500	<1,000	<1,000	140 J	***6,700,000***	***1,400,000***	***3,700,000***	#######	***3,500,000***
Ethylacetate	NA	NA	NA	<5,000	<5,000	NA	NA	1,700 J	<5,000	1,200 J

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C								
Top of Screen Depth (ft bls)	206	206	206	206	206	206	206	206	206
Sample Date	10/26/98	11/09/98	11/09/98	04/20/99	08/02/00	09/15/03	05/04/04	08/01/05	09/15/03
Sample ID	GWGM-25C	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C	GM-25C	GWGM-25C (5/4/04)	GWGM-25C (08/01/05)	GM-25C-DL
Alcohols									
2-Pentanone	NA	NA	NA	NA	NA	<1,000	<1,000	<1,000	NA
Ethanol	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	NA
Ethylene glycol	NA	<20,000	<20,000	<20,000	NA	<5,000	840 J	<10,000	NA
Isobutanol	NA	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	NA
Isopropanol	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	NA
Methanol	NA	<800	<800	<800	<1,000	<1,000	1,000	<1,000	NA
n-Butanol	NA	<1,000	<1,000	<1,000	<1,000	9,000	<1,000	<1,000	NA
n-Propanol	NA	NA	NA	R	<1,000	<1,000	<1,000	<1,000	NA
Tert-Butyl Alcohol	NA	NA	NA	R	<1,000	<1,000	<1,000	<1,000	NA
Aldehydes									
Acetaldehyde	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Butanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Crotonaldehyde	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Cyclohexanone	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Decanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Formaldehyde	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Heptanal	NA	<100 J	<100	<100	<100	<100	35 J	<100	NA
Hexanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
m-Tolualdehyde	NA	<100 J	<100	<100	<100	<100	45 J	<100	NA
Nonanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Octanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Paraldehyde	NA	<100	<100	<100	<100	<100	<100	<100	NA
Pentanal	NA	<100 J	<100	<100	<100	<100	54 J	<100	NA
Propanal	NA	<100 J	<100	<100	<100	<100	<100	<100	NA
Organic Acids									
Acetic Acid	<4,000	1,700	<1,000	<500	1,900	30,000	410 I	660	
Ethylacetate	NA	NA	NA	NA	<5,000	<5,000	<5,000	<5,000	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A					GM-26B				
Top of Screen Depth (ft bls)	30	30	30	30	30	101	101	101	101	101
Sample Date	10/07/98	04/14/99	11/29/99	09/09/03	05/13/04	10/07/98	04/15/99	11/30/99	07/18/00	09/09/03
Sample ID	GWGM-26A	GWGM-26A	GM-26A	GM-26A	GWGM-26A (5/13/04)	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B	GM-26B
Alcohols										
2-Pentanone	NA	NA	NA	<1,000	<1,000	NA	NA	NA	NA	<1,000
Ethanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Ethylene glycol	<20,000	<20,000 J	NA	9,800	1,000 J	<20,000	<20,000 J	NA	NA	<5,000
Isobutanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Isopropanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	NA	<1000 J	<1000
Methanol	<800	<800	NA	<1,000	1,800	<800	<800	NA	<1,000	<1,000
n-Butanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
n-Propanol	NA	R	NA	<1,000	<1,000	NA	R	NA	<1,000	<1,000
Tert-Butyl Alcohol	NA	R	NA	<1,000	<1,000	NA	R	NA	<1,000	<1,000
Aldehydes										
Acetaldehyde	<100 J	430	170	<100	<100	<100 J	<100	<100	<100 J	<100
Butanal	150 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Crotonaldehyde	<100 J	<100	<100	<100	30 J	<100 J	<100	<100	<100 J	<100
Cyclohexanone	<100 J	<100	<100	<100	560	<100 J	<100	<100	<100 J	<100
Decanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Formaldehyde	<100 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Heptanal	<100 J	<100	<100	<100	120	<100 J	<100	<100	<100 J	<100
Hexanal	120 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
m-Tolualdehyde	140 J	<100	<100	<100	1,300	<100 J	<100	<100	<100 J	<100
Nonanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Octanal	<100 J	<100	<100	<100	40 J	<100 J	<100	<100	<100 J	<100
Paraldehyde	<100 J	<100	<100	<100	<100	<100 J	<100	<100	<100	<100
Pentanal	<100 J	150	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Propanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100	<100 J	<100
Organic Acids										
Acetic Acid	4,800	16,000	15,000	<1,000	520	<200	<500	<1,000	<500	<1,000
Ethylacetate	NA	NA	NA	<5,000	<5,000	NA	NA	NA	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B (continued)		GM-26C					
Top of Screen Depth (ft bls)	101	101	160	160	160	160	160	160
Sample Date	04/27/04	07/28/05	10/25/98	04/17/99	11/30/99	09/16/03	05/18/04	05/18/04
Sample ID	GWGM-26B (4/27/04)	GWGM-26B (072805)	GWGM-26C	GWGM-26C	GM-26C	GM-26C	GWGM-26C (5/18/04)	GWGM-994 (5/18/04)
Alcohols								
2-Pentanone	<1,000	<1,000	NA	NA	NA	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<10,000	<20,000	<20,000 J	NA	<5,000	2,000 J	2,000 J
Isobutanol	<1,000	<1,000	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000
Isopropanol	<1000	<1,000	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000
Methanol	320 J	<1,000	<800	<800 J	NA	<1,000	1,600	3,000
n-Butanol	<1,000	<1,000	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	NA	R	NA	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	NA	R	NA	<1,000	<1,000	<1,000
Aldehydes								
Acetaldehyde	<100	<100	<100	230	130	<100	<100	<100
Butanal	<100	<100	<100	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100	<100	100	80 J
Cyclohexanone	<100	<100	<100	<100	110	<100	<100	<100
Decanal	<100	<100	<100	<100	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	<100	<100	<100	<100	<100
Heptanal	<100	<100	<100	<100	<100	<100	180	120
Hexanal	<100	<100	130	<100	<100	<100	<100	480
m-Tolualdehyde	<100	<100	<100	<100	<100	<100	430	<100
Nonanal	<100	<100	<100	<100	<100	<100	17 J	<100
Octanal	<100	<100	<100	<100	<100	<100	120	<100
Paraldehyde	<100	<100	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100	<100	180	<100	<100	140	<100
Propanal	<100	<100	<100	<100	<100	<100	<100	<100
Organic Acids								
Acetic Acid	<500	320 J	3,400	2,100	<1,000	1,400	690	840
Ethylacetate	<5,000	<5,000	NA	NA	NA	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A					GM-27B				
Top of Screen Depth (ft bls)	30	30	30	30	30	145	145	145	145	145
Sample Date	10/08/98	04/15/99	12/01/99	09/10/03	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04
Sample ID	GWGM-27A	GWGM-27A	GM-27A	GM-27A	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04
Alcohols										
2-Pentanone	NA	NA	NA	<1,000	<1,000	NA	NA	NA	<1,000	<1,000
Ethanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000 J	NA	<5,000	940 J	38,000	<20,000 J	NA	<5,000	<5,000
Isobutanol	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000 J	NA	<1,000	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000
Methanol	<800	<800	NA	<1,000	3,600	<800	<800	<1,000	<1,000	800 J
n-Butanol	<1,000	<1,000	NA	23,000	<1,000	<5,000 M	<1,000	<1,000	18,000	<1,000
n-Propanol	NA	R	NA	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	NA	R	NA	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Aldehydes										
Acetaldehyde	100 J	350	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Butanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Crotonaldehyde	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Cyclohexanone	<100 J	<100	<100	<100	670	<100 J	<100	<100 J	<100	<100
Decanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Formaldehyde	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	100	<100
Heptanal	<100 J	<100	<100	<100	120	<100 J	<100	<100 J	<100	<100
Hexanal	110 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
m-Tolualdehyde	<100 J	<100	<100	<100	1,500	<100 J	<100	<100 J	<100	<100
Nonanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Octanal	<100 J	<100	<100	<100	43 J	<100 J	<100	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100	<500	<100 J	<100	<100	<100	<100
Pentanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Propanal	<100 J	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100
Organic Acids										
Acetic Acid	920,000	3,600	<1,000	<1,000	420 I	<2,000	16,000	<500	<1,000	<500
Ethylacetate	NA	NA	NA	<5,000	<5,000	NA	NA	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B			GM-27C				
Top of Screen Depth (ft bls)	145	145	145	210	210	210	210	210
Sample Date	04/30/04	08/05/05	12/7/2006	11/09/98	04/26/99	04/26/99	08/07/00	09/11/03
Sample ID	GWGM-998 (4/30/04)	GWGM-27B (08/05/05)	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C	GM-27C
Alcohols								
2-Pentanone	<1,000	<1,000	<1,000	NA	NA	NA	NA	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<10,000	<10,000	<20,000	<20,000	<20,000	NA	<5,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000
Methanol	980 J	<1,000	<1,000	<800	<800 J	<800	<1,000	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	8,300
n-Propanol	<1,000	<1,000	<1,000	NA	R	R	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	NA	R	R	<1,000	<1,000
Aldehydes								
Acetaldehyde	<100	<100	<100	<100 J	<100	<100	<100	<100
Butanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100 J	<100	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100 J	<100	<100	<100	<100
Decanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	<100 J	<100	<100	<100	<100
Heptanal	<100	<100	<100	<100 J	<100	**160**	<100	<100
Hexanal	<100	<100	<100	<100 J	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	<100 J	<100	<100	<100	<100
Nonanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Octanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Paraldehyde	<100	<100	<100	<100 J	<100	<100	<100	<100
Pentanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Propanal	<100	<100	<100	<100 J	<100	<100	<100	<100
Organic Acids								
Acetic Acid	<500	180 J	<500	640	600	500	<1,000	<1,000
Ethylacetate	<5,000	<5,000	<5,000	NA	NA	NA	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)		GM-28A				
Top of Screen Depth (ft bls)	210	210	40	40	40	40	40
Sample Date	04/30/04	08/05/05	10/28/98	04/19/99	07/19/00	04/28/04	07/26/05
Sample ID	GWGM-27C (4/30/04)	GWGM-27C (08/05/05)	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)	GWGM28A (072605)
Alcohols							
2-Pentanone	<1,000	<1,000	NA	NA	NA	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	890 J	<10,000	38,000	<20000 J	NA	<5,000	<10,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000
Methanol	810 J	<1,000	<800	<800 J	<1,000	260 J	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1000 J	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	NA	R	<1,000	<1,000	<1,000
Aldehydes							
Acetaldehyde	<100	<100	<100	<100	<100 J	<100	<100
Butanal	<100	<100	<100	<100	<100 J	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100 J	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100 J	<100	<100
Decanal	<100	<100	<100	<100	<100 J	<100	<100
Formaldehyde	<100	<100	<100	<100	<100 J	<100	<100
Heptanal	<100	<100	<100	<100	<100 J	<100	<100
Hexanal	<100	<100	<100	<100	<100 J	<100	<100
m-Tolualdehyde	<100	<100	<100	<100	<100 J	<100	<100
Nonanal	<100	<100	<100	<100	<100 J	<100	<100
Octanal	<100	<100	<100	<100	<100 J	<100	<100
Paraldehyde	34 J	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100	<100	<100	<100 J	<100	<100
Propanal	<100	<100	<100	<100	<100 J	<100	<100
Organic Acids							
Acetic Acid	<500	150 J	<200	<500	<500	<500	410 J
Ethylacetate	<5,000	<5,000	NA	NA	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A		GM-28B					
Top of Screen Depth (ft bls)	40	40	124.5	124.5	124.5	124.5	124.5	124.5
Sample Date	07/26/05	12/5/2006	10/26/98	11/08/98	11/08/98	04/19/99	04/19/99	04/28/04
Sample ID	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-96	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B (4/28/04)
Alcohols								
2-Pentanone	<1,000	<1,000	NA	NA	NA	NA	NA	<1,000
Ethanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<10,000	<10,000	NA	<20,000	<20,000	<20,000 J	<20,000 J	<5,000
Isobutanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	1,600	NA	<800	<800	<800	<800	260 J
n-Butanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	NA	NA	NA	R	R	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	NA	NA	NA	R	R	<1,000
Aldehydes								
Acetaldehyde	<100	<100	NA	<100 J	<100	<100	<100	<100
Butanal	<100	<100	NA	<100 J	<100	<100	<100	<100
Crotonaldehyde	<100	<100	NA	<100 J	<100	<100	<100	<100
Cyclohexanone	<100	<100	NA	<100 J	<100	<100	<100	<100
Decanal	<100	18 J	NA	<100 J	<100	<100	<100	<100
Formaldehyde	<100	<100	NA	<100 J	<100	<100	<100	<100
Heptanal	<100	<100	NA	<100 J	<100	<100	<100	<100
Hexanal	<100	<100	NA	<100 J	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	NA	<100 J	<100	<100	<100	<100
Nonanal	<100	5.9 J	NA	<100 J	<100	<100	<100	<100
Octanal	<100	<100	NA	<100 J	<100	<100	<100	<100
Paraldehyde	<100	<100	NA	<100	<100	<100	<100	<100
Pentanal	<100	3.2 J	NA	<100 J	<100	<100	<100	<100
Propanal	<100	<100	NA	<100 J	<100	<100	<100	<100
Organic Acids								
Acetic Acid	410 J	<500	<200	<200	390	500	900	<500
Ethylacetate	<5,000	<5,000	NA	NA	NA	NA	NA	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)			GM-29			
Top of Screen Depth (ft bls)	124.5	124.5	124.5	55	55	55	55
Sample Date	04/28/04	07/26/05	12/5/2006	10/09/98	10/09/98	04/16/99	09/10/03
Sample ID	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GM-29
Alcohols							
2-Pentanone	<1,000	<1,000	<1,000	NA	NA	NA	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<10,000	<10,000	<20,000	<20,000	<20,000 J	<5,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Methanol	<1,000	<1,000	<1,000	<800	<800	<800	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	30,000
n-Propanol	<1,000	<1,000	<1,000	NA	NA	R	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	NA	NA	R	<1,000
Aldehydes							
Acetaldehyde	<100	<100	<100	<100 J	<100 J	<100	<100
Butanal	<100	<100	<100	<100 J	<100 J	<100	<100
Crotonaldehyde	<100	<100	<100	<100 J	<100 J	<100	<100
Cyclohexanone	<100	<100	<100	<100 J	<100 J	<100	<100
Decanal	<100	<100	8.4 J	<100 J	<100 J	<100	<100
Formaldehyde	<100	<100	<100	<100 J	<100 J	<100	<100
Heptanal	<100	<100	<100	<100 J	<100 J	<100	<100
Hexanal	<100	<100	<100	<100 J	<100 J	<100	<100
m-Tolualdehyde	<100	<100	<100	160 J	150 J	<100	<100
Nonanal	<100	<100	3.8 J	<100 J	<100 J	<100	<100
Octanal	<100	<100	3.8 J	<100 J	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100 J	<100 J	<100	<100
Pentanal	<100	<100	<100	<100 J	<100 J	<100	<100
Propanal	<100	<100	<100	<100 J	<100 J	<100	<100
Organic Acids							
Acetic Acid	<500	370 J	<500	<1,000	<2,000	<500	<1,000
Ethylacetate	<5,000	<5,000	<5,000	NA	NA	NA	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29			GM-30			GM-31
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105
Sample Date	05/03/04	07/28/05	12/8/2006	10/27/98	05/12/99	05/12/99	10/24/98
Sample ID	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31
Alcohols							
2-Pentanone	<1,000	<1,000	<1,000	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<10,000	<10,000	37,000	<20,000	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	1,200	<1,000	980 J	<800	<800	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	1,700 J	<1,000
n-Propanol	<1,000	<1,000	<1,000	NA	R	R	NA
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	NA	R	R	NA
Aldehydes							
Acetaldehyde	<100	<100	<100	<100	<100	<100	<100 J
Butanal	<100	<100	<100	<100	<100	<100	<100 J
Crotonaldehyde	<100	<100	<100	<100	<100	<100	<100 J
Cyclohexanone	<100	<100	<100	<100	<100	<100	<100 J
Decanal	<100	<100	<100	<100	<100	<100	<100 J
Formaldehyde	<100	<100	<100	<100	<100	<100	<100 J
Heptanal	<100	<100	3.2 J	<100	<100	<100	<100 J
Hexanal	<100	<100	<100	<100	<100	<100	<100 J
m-Tolualdehyde	<100	<100	<100	<100	<100	<100	<100 J
Nonanal	<100	<100	4.0 J	<100	<100	<100	<100 J
Octanal	<100	<100	3.2 J	<100	<100	<100	<100 J
Paraldehyde	<100	<100	<100	<100	<100	<100	<100 J
Pentanal	<100	<100	4.9 J	<100	<100	<100	<100 J
Propanal	<100	<100	<100	<100	<100	<100	<100 J
Organic Acids							
Acetic Acid	<500	420 J	<500	290	<500	<500	340
Ethylacetate	<5,000	<5,000	<5,000	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-31 (continued)	GM-32				GM-33	GM-34A	
Top of Screen Depth (ft bls)	105	135	135	135	135	74	30	30
Sample Date	05/03/99	10/25/98	04/27/99	09/25/03	05/26/04	05/10/99	10/08/98	04/17/99
Sample ID	GWGM-31	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-33	GWGM-34A	GWGM-34A
Alcohols								
2-Pentanone	NA	NA	NA	<10,000	<1,000	NA	NA	NA
Ethanol	<1,000	<1,000	<50,000	<10,000	<1,000	<1,000	<1,000 M	<1,000
Ethylene glycol	<20,000 J	<200,000 M	<20,000	<5,000	4,800 J	<20,000	<20,000	<20,000 J
Isobutanol	<1,000	<1,000	<50,000	<10,000	<1,000	<1,000	<1,000 M	<1,000
Isopropanol	<1,000	2,800	680,000 J	<10,000	630 J	<1,000	<1,000 M	<1,000
Methanol	2,400 J	24,000	<50,000	140,000	2,800	<800	<1,000 M	<800 J
n-Butanol	<1,000	<1,000	<50,000	<10,000	<1,000	<1,000	<1,000 M	<1,000 J
n-Propanol	R	NA	R	<10,000	340 J	R	NA	R
Tert-Butyl Alcohol	R	NA	R	<10,000	<1,000	R	NA	R
Aldehydes								
Acetaldehyde	<100	2,500 J	3,600	560	1,200	<100	<100 J	<100
Butanal	<100	2300 J	<500	<100	2500	<100	<100 J	<100
Crotonaldehyde	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Cyclohexanone	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Decanal	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Formaldehyde	<100	500 J	<500	480	240	<100	<100 J	<100
Heptanal	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Hexanal	<100	<400 J	<500	<100	<100	<100	<100 J	<100
m-Tolualdehyde	<100	560 J	<500	480	3400	<100	<100 J	<100
Nonanal	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Octanal	<100	<400 J	<500	<100	<100	<100	<100 J	<100
Paraldehyde	<100	<100 J	<100	<500	<100	<100	<100	<100
Pentanal	<100	500 J	550	550	2000	<100	<100 J	<100
Propanal	<100	<400 J	<500	<100	63 J	<100	<100 J	<100
Organic Acids								
Acetic Acid	<500	3,400,000	<500	3,500,000	2,600,000 B	<500	<200	<500
Ethylacetate	NA	NA	NA	<50,000	1,600 J	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A (continued)	GM-34B				GM-35		
Top of Screen Depth (ft bls)	30	85	85	85	85	40	40	40
Sample Date	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04	11/04/98	05/04/99	05/04/99
Sample ID	GWGM-34A (4/29/04)	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-35	GWGM-35	GWGM-84
Alcohols								
2-Pentanone	<1,000	NA	NA	<1,000	<1,000	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	1,700 J	<20,000	<20,000 J	<5,000	<5,000	<20,000	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	420 J	<800	<800	<1,000	330 J	<800	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	NA	R	<1,000	<1,000	NA	R	R
Tert-Butyl Alcohol	<1,000	NA	R	<1,000	<1,000	NA	R	R
Aldehydes								
Acetaldehyde	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Butanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Crotonaldehyde	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Cyclohexanone	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Decanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Formaldehyde	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Heptanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Hexanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
m-Tolualdehyde	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Nonanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Octanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Paraldehyde	<100	<100 J	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Propanal	<100	<100 J	<100	<100	<100	<100 J	<100	<100
Organic Acids								
Acetic Acid	<500	<200	<500	<1,000	<500	<1,500	<500	<500
Ethylacetate	<5,000	NA	NA	<5,000	<5,000	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-36			GM-37A				GM-37B	
Top of Screen Depth (ft bls)	95	95	95	144	144	144	144	328	328
Sample Date	11/03/98	05/05/99	05/04/04	11/18/98	05/11/99	09/25/03	05/17/04	10/13/98	05/14/99
Sample ID	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-37A	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B	GWGM-37B
Alcohols									
2-Pentanone	NA	NA	<1,000	NA	NA	<1,000	<1,000	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000 J	<2,500	<1,000	<1,000	<50,000	<10,000
Ethylene glycol	<20,000	<20,000	980 J	35,000 J	<100,000	<5,000	1,600 J	<200,000	46,000 J
Isobutanol	<1,000	<1,000	<1,000	<1,000 J	<2,500	<1,000	<1,000	<50,000	<10,000
Isopropanol	<1,000	<1,000	<1,000	1,100 J	<2,500	<1,000	<1,000	<50,000	<10,000
Methanol	<800	<800	980 J	<800 J	<2,500	<1,000	1,100	<50,000	<10,000
n-Butanol	<1,000	<1,000	<1,000	11,000 J	15,000 J	<1,000	<1,000	640,000	<14,000
n-Propanol	NA	R	<1,000	NA	R	<1,000	<1,000	NA	R
Tert-Butyl Alcohol	NA	R	<1,000	NA	R	<1,000	<1,000	NA	R
Aldehydes									
Acetaldehyde	<100 J	<100	<100	<500 J	<100	<100	<100	1,100	2,400
Butanal	<100 J	<100	<100	5,100 J	<100	<100	370	1,600	<500
Crotonaldehyde	<100 J	<100	<100	<500 J	<100	<100	<100	<100	<500
Cyclohexanone	<100 J	<100	<100	<500 J	<100	<100	<100	190	<500
Decanal	<100 J	<100	<100	<500 J	<100	<100	<100	<100	<500
Formaldehyde	<100 J	<100	<100	<500 J	130	<100	<100	340	<500
Heptanal	<100 J	<100	<100	<500 J	<100	<100	34 J	<100	<500
Hexanal	<100 J	<100	<100	<500 J	<100	<100	<100	<100	<500
m-Tolualdehyde	<100 J	<100	<100	<2,100 J	<100	<100	260	470	<500
Nonanal	<100 J	<100	<100	<500 J	<100	<100	22 J	<100	<500
Octanal	<100 J	<100	<100	<500 J	<100	<100	54 J	<100	<500
Paraldehyde	<100 J	<100	<100	<100	<100	<100	<100	<100	<100
Pentanal	<100 J	<100	<100	<500 J	510	<100	120	380	<500
Propanal	<100 J	<100	<100	<500 J	<100	<100	<100	120	<500
Organic Acids									
Acetic Acid	<200	<500	<500	1,600,000	1,710,000	3,100	270,000	15,000,000	9,100,000
Ethylacetate	NA	NA	<5,000	NA	NA	<5,000	<5,000	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)		GM-38A			GM-38B		GM-38C	
Top of Screen Depth (ft bls)	328	328	95	95	95	160	160	200	200
Sample Date	09/25/03	05/27/04	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98	10/20/98
Sample ID	GM-37B	GWGM-37B (5/27/04)	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C	GWGM-97
Alcohols									
2-Pentanone	<1,000	<1,000	NA	NA	NA	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1000 J	<1,000	<1,000
Ethylene glycol	<5,000	980 J	<20,000	<20,000	<20,000 J	<20,000	<20,000	<20,000	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000	<1,000
Methanol	2,600	1,700	<800	<800	<800	<800	<800	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	NA	NA	R	NA	R	NA	NA
Tert-Butyl Alcohol	<1,000	<1,000	NA	NA	R	NA	R	NA	NA
Aldehydes									
Acetaldehyde	110	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Butanal	<100	84	<100	<100	<100	<100	<100	<100 J	<100 J
Crotonaldehyde	<100	30	<100	<100	<100	<100	<100	<100 J	<100 J
Cyclohexanone	<100	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Decanal	<100	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Formaldehyde	**160**	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Heptanal	<100	50	<100	<100	<100	<100	<100	<100 J	<100 J
Hexanal	<100	150	<100	<100	<100	<100	<100	<100 J	<100 J
m-Tolualdehyde	310	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Nonanal	<100	17	<100	<100	<100	<100	<100	<100 J	<100 J
Octanal	<100	78	<100	<100	<100	<100	<100	<100 J	<100 J
Paraldehyde	<100	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Pentanal	<100	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Propanal	<100	<100	<100	<100	<100	<100	<100	<100 J	<100 J
Organic Acids									
Acetic Acid	***870,000***	***1,100,000 B***	500	<200	<500	290	<500	730	<200
Ethylacetate	<5,000	<5,000	NA	NA	NA	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C (continued)	GM-39			GM-40A			GM-40B	
Top of Screen Depth (ft bls)	200	85	85	85	75	75	75	120	120
Sample Date	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04	10/26/98	04/27/99
Sample ID	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)	GWGM-40B	GWGM-40B
Alcohols									
2-Pentanone	NA	NA	NA	NA	NA	NA	<1,000	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<250,000
Ethylene glycol	<20,000 J	<20,000	<20,000 J	<20,000 J	<20,000	<20,000	<5,000	84,000	<20,000
Isobutanol	<1,000	1,200	<1,000 J	<1,000 J	<1,000	<1,000	<1,000	<1,000	<250,000
Isopropanol	<1,000	<1,000	2,300 J	<1,000 J	<1,000	<1,000	<1,000	2,400	1,000,000 J
Methanol	1,700 J	<800	<800	<800	<800	<800	990 J	1,400	<250,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000 M	1,500,000 J
n-Propanol	R	NA	R	R	NA	R	<1,000	NA	R
Tert-Butyl Alcohol	R	NA	<1,000	R	NA	R	<1,000	NA	R
Aldehydes									
Acetaldehyde	<100	<100 J	<100	<100	<100	<100	<100	1,200 J	1,600
Butanal	<100	<100 J	<100	<100	<100	<100	<100	2,100 J	<500
Crotonaldehyde	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
Cyclohexanone	<100	<100 J	<100	<100	<100	<100	<100	120 J	<500
Decanal	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
Formaldehyde	<100	<100 J	<100	<100	<100	<100	<100	280 J	<500
Heptanal	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
Hexanal	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
m-Tolualdehyde	<100	<100 J	<100	<100	<100	<100	<100	500 J	<500
Nonanal	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
Octanal	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<500
Paraldehyde	<100	<100 J	<100	<100	<100	<100	<100	<100 J	<100
Pentanal	<100	<100 J	<100	<100	<100	<100	<100	250 J	<500
Propanal	<100	<100 J	<100	<100	<100	<100	<100	110 J	<500
Organic Acids									
Acetic Acid	<500	<200	500	<500	<200	<500	<500	8,100,000	14,600,000
Ethylacetate	NA	NA	NA	NA	NA	NA	<5,000	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B (continued)	GM-41		GM-42		GM-49	GM-50		GM-51	
Top of Screen Depth (ft bls)	120	40	40	72	72	83.5	80.5	80.5	67	67
Sample Date	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99	10/14/98	04/17/99	10/20/98	04/18/99
Sample ID	GWGM-40B (5/19/04)	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49	GWGM-50	GWGM-50	GWGM-51	GWGM-51
Alcohols										
2-Pentanone	<1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<5,000 M	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000	3,600 J
Ethylene glycol	1,200 J	<20,000	<20,000 J	<20,000	<20,000 J	<20,000 J	<20,000	<20,000 J	<20,000	<20,000 J
Isobutanol	<1,000	<1,000	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	470 J	<1,000	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	2,100	<800	<800	<800	<800 J	<800 J	<800	<800 J	<800	<800 J
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000 J	<1,000	<1,000 J
n-Propanol	<1,000	NA	R	NA	R	R	NA	R	NA	R
Tert-Butyl Alcohol	<1,000	NA	R	NA	R	R	NA	R	NA	R
Aldehydes										
Acetaldehyde	150	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Butanal	1,700	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Crotonaldehyde	120	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Decanal	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Formaldehyde	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Heptanal	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Hexanal	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
m-Tolualdehyde	3,000	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Nonanal	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Octanal	82 J	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Paraldehyde	<500	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Pentanal	700	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Propanal	<100	<100 J	<100	<100 J	<100	<100	<100	<100	<100	<100
Organic Acids										
Acetic Acid	2,000,000	<200	<500	460	<500	<500	<200	<500	250	<500
Ethylacetate	1,400 J	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-52	GM-53A	GM-53B		GM-54		GM-55			GM-56
Top of Screen Depth (ft bls)	75	79	195	195	80	80	75	75	75	32
Sample Date	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98	05/01/99	10/24/98	05/01/99	05/01/99	10/21/98
Sample ID	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54	GWGM-54	GWGM-55	GWGM-55	GWGM-85	GWGM-56
Alcohols										
2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<20,000 J	<20,000 J	<20,000	<20,000 J	<20,000	<20,000 J	<20,000	<20,000 J	<20,000 J	<20,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<800 J	<800	<800	<800	<800	<800	<800	<800	<800	<800
n-Butanol	<1,000 J	<1,000	<1,000	<1,000	28,000	1,000 J	41,000	<1,000	<1,000	<1,000
n-Propanol	R	R	NA	R	NA	R	NA	R	R	NA
Tert-Butyl Alcohol	R	R	NA	R	NA	R	NA	R	R	NA
Aldehydes										
Acetaldehyde	<100	<100	<100 J	100	<100 J	<100	<100 J	<100	<100	<100 J
Butanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Crotonaldehyde	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Cyclohexanone	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Decanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Formaldehyde	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Heptanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Hexanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
m-Tolualdehyde	<100	<100	480 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Nonanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Octanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Paraldehyde	<100	<100	<100	<100	<100 J	<100	<100 J	<100	<100	<100 J
Pentanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Propanal	<100	<100	<100 J	<100	<100 J	<100	<100 J	<100	<100	<100 J
Organic Acids										
Acetic Acid	<500	<500	1,300	<500	<200	<500	430	<500	<500	NA
Ethylacetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-56 (continued)		GM-57	GM-58	GM-59		GM-60	GM-61	GM-62A
Top of Screen Depth (ft bls)	32	32	76	75	114	114	102	138	90
Sample Date	10/24/98	04/20/99	04/20/99	04/26/99	11/17/98	04/28/99	05/12/99	05/03/99	08/23/99
Sample ID	GWGM-56	GWGM-56	GWGM-57	GWGM-58	GWGM-59	GWGM-59	GWGM-60	GWGM-61	GWGM-62A
Alcohols									
2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethanol	NA	<1,000 J	<1,000	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000
Ethylene glycol	NA	<20,000 J	<20,000	<20,000	<20,000 J	<20,000	<20,000	<20,000	NA
Isobutanol	NA	<1,000 J	<1,000 J	<1,000	<1,000 J	19,000 J	<1,000	<1,000	<1,000
Isopropanol	NA	<1,000 J	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Methanol	NA	<800 J	<800	<800	<800 J	<10,000 J	<800	<800	<1,000
n-Butanol	NA	<1,000 J	<1,000	<1,000	<1,000 J	<10,000	<1,000	<1,000	<1,000
n-Propanol	NA	R	R	R	NA	R	R	R	<1,000
Tert-Butyl Alcohol	NA	R	R	R	NA	R	R	R	<1,000
Aldehydes									
Acetaldehyde	NA	<100	<100	<100	<100	<100	<100	<100	<100
Butanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Crotonaldehyde	NA	<100	<100	<100	<100	<100	<100	<100	<100
Cyclohexanone	NA	<100	<100	<100	<100	<100	<100	<100	<100
Decanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Formaldehyde	NA	<100	<100	<100	<100	<100	<100	<100	<100
Heptanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Hexanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
m-Tolualdehyde	NA	<100	<100	<100	<100	<100	<100	<100	<100
Nonanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Octanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Paraldehyde	NA	<100	<100	<100	<100	<100	<100	<100	<100
Pentanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Propanal	NA	<100	<100	<100	<100	<100	<100	<100	<100
Organic Acids									
Acetic Acid	320	<500	<500	<500	260	<500	<500	4,000	<500
Ethylacetate	NA	NA	NA	NA	NA	NA	NA	NA	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62A (continued)	GM-62B			GM-62C		GM-63A	
Top of Screen Depth (ft bls)	90	195	195	195	315	315	45	45
Sample Date	05/11/04	08/24/99	08/24/99	05/19/04	08/24/99	05/18/04	08/29/00	09/19/00
Sample ID	GWGM-62A (5/11/04)	GWGM-62B	GWGM-82	GWGM-62B (5/19/04)	GWGM-62C	GWGM-62C (5/18/04)	GWGM-63A	GWGM-63A
Alcohols								
2-Pentanone	<1,000	NA	NA	<1,000	NA	<1,000	NA	NA
Ethanol	<1,000	120 J	73 J	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	NA	NA	<5,000	NA	<5,000	NA	NA
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J
Isopropanol	<1,000	220 J	200 J	<1,000	320 J	<1,000	<1,000	<1,000
Methanol	1,800	10,000 BJ	9,700 BJ	6,800 J	<1,000	2,400	1,300	<1,000
n-Butanol	<1,000	R	R	200,000	<1,000	<1,000	<1,000 J	<1,000 J
n-Propanol	<1,000	110 J	140 J	340 J	110 J	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000 J	<1,000 J	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes								
Acetaldehyde	<100	1,100	940	<100	1,100	<100	160 J	230
Butanal	<100	<100	<100	1,400	<100	<100	<100 J	<100
Crotonaldehyde	<100	<100	<100	56 J	<100	<100	<100 J	<100
Cyclohexanone	<100	<100	<100	1,400	<100	<100	<100 J	<100
Decanal	<100	<100	<100	<100	<100	<100	<100 J	<100
Formaldehyde	<100	210	130	<100	120	<100	<100 J	<100
Heptanal	<100	<100	<100	<100	<100	45 J	<100 J	<100
Hexanal	<100	<100	<100	<100	<100	160	<100 J	<100
m-Tolualdehyde	50 J	<100	<100	2,800	<100	<100	<100 J	<100
Nonanal	21 J	<100	<100	<100	<100	19 J	<100 J	<100
Octanal	26 J	<100	<100	81 J	<100	55 J	<100 J	<100
Paraldehyde	<100	<100	<100	<500	<100	<100	<100	<100
Pentanal	<100	410	370	<100	420	<100	<100 J	<100
Propanal	<100	<100	<100	<100	<100	<100	<100 J	<100
Organic Acids								
Acetic Acid	360 J	1,420,000	905,000	670,000	738,000	130,000	NA	<1,000
Ethylacetate	<5,000	1,100 J	980 J	3,300 J	820 J	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A (continued)		GM-63B			GM-64A		
Top of Screen Depth (ft bls)	45	45	105	105	105	33	33	33
Sample Date	09/15/03	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00	10/03/00	09/08/03
Sample ID	GM-63A	GWGM-63A (5/5/04)	GWGM-63B	GM-63B	GWGM-63B (4/27/04)	GWGM-64A	GWGM-64A	GM-64A
Alcohols								
2-Pentanone	<1,000	<1,000	NA	<1,000	<1,000	NA	NA	<1,000
Ethanol	<1,000	<1,000	NA	<1,000	<1,000	<1,000	<1,000 J	<1,000
Ethylene glycol	<5,000	<5,000	NA	<5,000	<5,000	NA	NA	<5,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Methanol	<1,000	650 J	<1,000	1,300	460 J	<1,000	<1,000 J	<1,000
n-Butanol	<1,000	<1,000	<1,000 J	10,000	<1,000	<1,000 J	<1,000 J	17,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Aldehydes								
Acetaldehyde	<100	<100	<100	<100	<100	<100	<100	<100
Butanal	<100	<100	<100	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100	<100	<100	<100
Decanal	<100	<100	<100	<100	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	<100	<100	<100	<100	<100
Heptanal	<100	38 J	<100	<100	<100	<100	<100	<100
Hexanal	<100	<100	<100	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	<100	<100	<100	<100	<100
Nonanal	<100	<100	<100	<100	<100	<100	<100	<100
Octanal	<100	<100	<100	<100	<100	<100	<100	<100
Paraldehyde	<100	<500	<100	<100	<100	<100	<100	<100
Pentanal	<100	25 J	<100	<100	<100	<100	<100	<100
Propanal	<100	<100	<100	<100	<100	<100	<100	<100
Organic Acids								
Acetic Acid	<1,000	200 J	<500	<1,000	<500	NA	<500	<1,000
Ethylacetate	<5,000	<5,000	NA	<5,000	<5,000	<5,000	<5,000 J	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)	GM-64B			GM-66A		
Top of Screen Depth (ft bls)	33	117	117	117	27	27	27
Sample Date	05/04/04	07/24/00	09/08/03	05/11/04	07/18/00	09/16/03	04/27/04
Sample ID	GWGM-64A (5/4/04)	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A	GWGM-66A (4/27/04)
Alcohols							
2-Pentanone	<1,000	NA	<1,000	<1,000	NA	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	1,100 J	NA	<5,000	<5,000	NA	<5,000	<5,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000 J	<1,000	<1,000	<1,000 J	<1,000	<1,000
Methanol	920 J	<1,000	<1,000	2,400	<1,000	<1,000	<1,000
n-Butanol	<1,000	<1,000	19,000	<1000	<1,000	3,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes							
Acetaldehyde	<100	130	<100	<100	100 J	<100	<100
Butanal	<100	<100	<100	<100	<100 J	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100 J	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100 J	<100	<100
Decanal	<100	<100	<100	<100	<100 J	<100	<100
Formaldehyde	<100	<100	<100	<100	<100 J	<100	<100
Heptanal	30 J	<100	<100	<100	<100 J	<100	<100
Hexanal	<100	<100	<100	120	<100 J	<100	<100
m-Tolualdehyde	<100	<100	<100	51 J	<100 J	<100	<100
Nonanal	<100	<100	<100	<100	<100 J	<100	<100
Octanal	13 J	<100	<100	<100	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100	<100	<100	<100
Pentanal	58 J	<100	<100	26 J	<100 J	<100	<100
Propanal	<100	<100	<100	<100	<100 J	<100	<100
Organic Acids							
Acetic Acid	<500	<500	<1,000	400 J	<500	<1,000	<500
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A (continued)	GM-66B					
Top of Screen Depth (ft bls)	27	125	125	125	125	125	125
Sample Date	07/27/05	07/19/00	08/03/00	09/11/03	09/11/03	05/10/04	07/27/05
Sample ID	GWGM66A (072705)	GWGM-66B	GMGW-66B	GM-66B	GM-66B (09/11/03)	GWGM-66B (5/10/04)	GWGM66B (072705)
Alcohols							
2-Pentanone	<1,000	NA	NA	<1,000	NA	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Ethylene glycol	<10,000	NA	NA	<5,000	NA	<5,000	<10,000
Isobutanol	<1,000	<1,000 J	<1,000 J	<1,000	NA	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Methanol	<1,000	<1,000	<1,000	<1,000	NA	1,900	<1,000
n-Butanol	<1,000	<1,000	<1,000	20,000	NA	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000
Aldehydes							
Acetaldehyde	<100	<100 J	**160 J**	NA	<100	<100	<100
Butanal	<100	<100 J	<100 J	NA	<100	<100	<100
Crotonaldehyde	<100	<100 J	<100 J	NA	<100	<100	<100
Cyclohexanone	<100	<100 J	<100 J	NA	<100	<100	<100
Decanal	<100	<100 J	<100 J	NA	<100	<100	<100
Formaldehyde	<100	<100 J	<100 J	NA	<100	<100	<100
Heptanal	<100	<100 J	<100 J	NA	<100	19 J	22 J
Hexanal	<100	<100 J	<100 J	NA	<100	<100	61 J
m-Tolualdehyde	<100	<100 J	<100 J	NA	<100	<100	<100
Nonanal	<100	<100 J	<100 J	NA	<100	<100	<100
Octanal	<100	<100 J	<100 J	NA	<100	17 J	14 J
Paraldehyde	<100	<100	<100	NA	<100	<100	<100
Pentanal	<100	<100 J	<100 J	NA	<100	<100	63 J
Propanal	<100	<100 J	<100 J	NA	<100	<100	<100
Organic Acids							
Acetic Acid	<500	2,000	<1,000	<1,000	NA	200 J	<500
Ethylacetate	<5,000	<5,000	<5,000	<5,000	NA	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)	GM-67	GM-68		GM-70	GM-71	GM-72	
Top of Screen Depth (ft bls)	125	122	140	140	42	39	43	43
Sample Date	12/08/06	08/07/00	08/31/00	09/26/00	08/17/00	08/21/00	08/22/00	09/24/03
Sample ID	GWGM-66B (12/8/06)	GWGM-67	GWGM-68	GWGM-68	GWGM-70	GWGM-71	GWGM-72	GM-72
Alcohols								
2-Pentanone	<1,000	NA	NA	NA	NA	NA	NA	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<10,000	NA	NA	NA	NA	NA	NA	<5,000
Isobutanol	<1,000	<1,000 J	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	<1,000	<1,000 J	<1,000 J	41,000	<1,000	<1,000	<1,000
n-Butanol	<1,000	<1,000	<1,000 J	<1,000 J	<1,000 J	<1,000 J	<1,000 J	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000 J	<1,000	<1,000	<1,000	<1,000
Aldehydes								
Acetaldehyde	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
Butanal	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
Crotonaldehyde	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
Cyclohexanone	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
Decanal	7.1 J	<100	<100 J	<100	<100 J	<100 J	<100	<100
Formaldehyde	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
Heptanal	7.2 J	<100	<100 J	<100	<100 J	<100 J	<100	<100
Hexanal	<100	<100	<100 J	<100	<100 J	<100 J	<100	<100
m-Tolualdehyde	7.0 J	<100	<100 J	<100	<100 J	<100 J	<100	<100
Nonanal	4.4 J	<100	<100 J	<100	<100 J	<100 J	<100	<100
Octanal	5.4 J	<100	<100 J	<100	<100 J	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100	<100 J	<100 J	<100	<100
Pentanal	7.9 J	<100	<100 J	<100	<100 J	<100 J	160	<100
Propanal	<100	<100	<100 J	<100	<100 J	<100 J	250	<100
Organic Acids								
Acetic Acid	<500	<1,000	NA	<1,000	1,700	210	**31,000**	<1,000
Ethylacetate	<5,000	<5,000	<5,000	<5,000 J	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-72 (continued)		GM-72A		GM-73		GM-74	GM-75
Top of Screen Depth (ft bls)	43	43	46	46	42	42	34	24
Sample Date	01/05/04	04/16/04	07/25/05	12/12/06	09/06/00	09/06/00	09/07/00	09/08/00
Sample ID	GWGM-72	GM-72	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)	GMGW-73	GWGM-73	GWGM-74	GWGM-75
Alcohols								
2-Pentanone	<1,000	<1,000	<1,000	<1,000	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	930 JB	<10,000	<10,000	NA	NA	NA	NA
Isobutanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000
Methanol	<1,000	1,300	<1,000	940 J	NA	1,100	<1,000	1,400
n-Butanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000 J	<1,000 J	<1,000 J
n-Propanol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	NA	<1,000	<1,000	<1,000
Aldehydes								
Acetaldehyde	24 J	<100	<100	<100	<100	NA	<100	<100
Butanal	<100	<100	180	<100	<100	NA	<100	<100
Crotonaldehyde	<100	230	710	1600	<100	NA	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100	NA	<100	<100
Decanal	<100	<100	<100	<100	<100	NA	<100	<100
Formaldehyde	29 J	<100	<100	<100	<100	NA	<100	<100
Heptanal	<100	92 J	39 J	68 J	<100	NA	<100	<100
Hexanal	<100	<100	260	230	<100	NA	<100	<100
m-Tolualdehyde	<100	220	940	250	<100	NA	<100	<100
Nonanal	<100	<100	<100	<100	<100	NA	<100	<100
Octanal	25 J	130	78 J	160	<100	NA	<100	<100
Paraldehyde	<500	<100	<100	<100	<100	NA	<100	<100
Pentanal	60 J	<100	530	100	<100	NA	<100	<100
Propanal	<100	180	<100	<100	<100	NA	<100	<100
Organic Acids								
Acetic Acid	<1,000	1,000	**30,000 B**	550	<1,000	NA	<1,000	<1,000
Ethylacetate	<5,000	790 J	<5,000	<5,000	NA	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-77			GM-78		
Top of Screen Depth (ft bls)	105	105	105	20	20	20
Sample Date	09/22/03	05/11/04	07/28/05	09/18/03	04/29/04	07/29/05
Sample ID	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)
Alcohols						
2-Pentanone	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<5,000	<10,000	<5,000	1,000 J	<10,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	1,500	<1,000	<1,000	320 J	<1,000
n-Butanol	<1,000	<1,000	<1,000	2,400	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes						
Acetaldehyde	<100	<100	<100	<100	<100	<100
Butanal	<100	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100	<100
Decanal	<100	<100	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	<100	<100	<100
Heptanal	<100	51 J	22 J	<100	<100	<100
Hexanal	<100	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	41 J	<100	<100	<100	<100
Nonanal	<100	18 J	<100	<100	<100	<100
Octanal	<100	30 J	13 J	<100	<100	<100
Paraldehyde	<100	<100	<100	<100	<100	<100
Pentanal	<100	<100	61 J	<100	<100	<100
Propanal	<100	<100	<100	<100	<100	<100
Organic Acids						
Acetic Acid	<1,000	860	590	<1,000	<500	360 J
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78		GM-79			
Top of Screen Depth (ft bls)	20	20	25	25	25	25
Sample Date	07/29/05	12/08/06	09/18/03	04/26/04	07/29/05	12/04/06
Sample ID	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)
Alcohols						
2-Pentanone	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<10,000	<10,000	<5,000	<5,000	<10,000	<10,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	<1,000	<1,000	580 J	<1,000	1,400
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes						
Acetaldehyde	<100	<100	<100	<100	<100	<100
Butanal	<100	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100	<100
Decanal	<100	<100	<100	<100	<100	6.2 J
Formaldehyde	<100	<100	<100	<100	<100	<100
Heptanal	52 J	<100	<100	<100	<100	<100
Hexanal	120	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	<100	<100	<100
Nonanal	40 J	4.1 J	<100	<100	<100	3.4 J
Octanal	13 J	<100	<100	<100	<100	3.5 J
Paraldehyde	<100	<100	<100	<100	<100	<100
Pentanal	81 J	<100	<100	<100	<100	<100
Propanal	<100	<100	<100	<100	<100	<100
Organic Acids						
Acetic Acid	360 J	<500	<1,000	<500	310 J	<500
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-82A		GM-84		
Top of Screen Depth (ft bls)	82	82	77	77	77
Sample Date	06/02/04	06/05/04	08/19/04	08/01/05	12/12/06
Sample ID	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)
Alcohols					
2-Pentanone	<1,000	<1,000	<5,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	1,100 J	790 J	<10,000	<10,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	860 J	420 J	<1,000	<1,000	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes					
Acetaldehyde	<100	<100	<100	<100	<100
Butanal	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	39 J	<100
Cyclohexanone	<100	<100	<100	790	<100
Decanal	26 J	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	37 J	<100
Heptanal	45 J	<100	<100	23 J	<100
Hexanal	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	2100	<100
Nonanal	36 J	<100	<100	<100	<100
Octanal	31 J	<100	<100	39 J	<100
Paraldehyde	<100	<100	<100	<100	<100
Pentanal	<100	<100	<100	<100	<100
Propanal	<100	<100	<100	<100	<100
Organic Acids					
Acetic Acid	290 JB	320 JB	820 B	360 J	<500
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-87A		GM-87B	GM-118D		GMSB-111[1]
Top of Screen Depth (ft bls)	32	32	117	54	54	--
Sample Date	12/05/06	12/05/06	12/05/06	10/21/98	04/29/99	08/19/03
Sample ID	GWGM-87A (12/5/06)	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D	GBGWGMSB-111/26
Alcohols						
2-Pentanone	<1,000	<1,000	<1,000	NA	NA	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000 J	<1,000
Ethylene glycol	<10,000	<10,000	<10,000	<20,000	<20,000	<5,000
Isobutanol	<1,000	<1,000	<1,000	3,000	<1,000 J	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	1,700	880 J	<800	<800	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	NA	R	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	NA	R	<1,000
Aldehydes						
Acetaldehyde	<100	<100	<100	<100 J	<100	<100
Butanal	<100	<100	<100	<100 J	<100	<100
Crotonaldehyde	<100	<100	<100	<100 J	<100	<100
Cyclohexanone	<100	<100	<100	<100 J	<100	<100
Decanal	12 J	6.6 J	<100	<100 J	<100	<100
Formaldehyde	<100	<100	<100	<100 J	<100	<100
Heptanal	3.9 J	3.5 J	<100	<100 J	<100	<100
Hexanal	<100	<100	<100	<100 J	<100	<100
m-Tolualdehyde	<100	<100	<100	<100 J	<100	<100
Nonanal	3.9 J	3.5 J	3.1 J	<100 J	<100	<100
Octanal	2.9 J	2.6 J	3.8 J	<100 J	<100	<100
Paraldehyde	<100	<100	<100	<100 J	<100	<100
Pentanal	3.5 J	3.3 J	<100	<100 J	<100	<100
Propanal	<100	<100	<100	<100 J	<100	<100
Organic Acids						
Acetic Acid	<500	<500	1,000	<200	<500	<1,000
Ethylacetate	<5,000	<5,000	<5,000	NA	NA	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-112[1]		GMSB-113[1]		
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/03/03	09/03/03	09/05/03	09/05/03	09/04/03
Sample ID	GBGWGMSB-112/134	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27
Alcohols					
2-Pentanone	<1,000	54,000	<1,000	<1,000	<1,000
Ethanol	<1,000	<5,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<5,000	<5,000	<5,000	<5,000
Isobutanol	<1,000	<5,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<5,000	<1,000	<1,000	<1,000
Methanol	<1,000	<5,000	<1,000	<1,000	<1,000
n-Butanol	<1,000	<5,000	8,000	70,000	4,700
n-Propanol	<1,000	<5,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<5,000	<1,000	<1,000	<1,000
Aldehydes					
Acetaldehyde	<100	<100	NA	<100	<100
Butanal	<100	<100	NA	<100	<100
Crotonaldehyde	<100	<100	NA	<100	<100
Cyclohexanone	<100	<100	NA	<100	<100
Decanal	<100	<100	NA	<100	<100
Formaldehyde	<100	<100	NA	<100	<100
Heptanal	<100	<100	NA	<100	<100
Hexanal	<100	<100	NA	<100	<100
m-Tolualdehyde	<100	<100	NA	<100	<100
Nonanal	<100	<100	NA	<100	<100
Octanal	<100	<100	NA	<100	<100
Paraldehyde	<100	<100	NA	<100	<100
Pentanal	100	<100	NA	<100	<100
Propanal	<100	<100	NA	<100	<100
Organic Acids					
Acetic Acid	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylacetate	<5,000	<25,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-116[1]		GMSB-117[1]		GMSB-118[1]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/12/03	08/11/03	08/14/03	08/15/03	08/16/03
Sample ID	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25
Alcohols					
2-Pentanone	<1,000	<1,000	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<5,000	<5,000	<5,000	<5,000
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	<1,000	<1,000	<1,000	<1,000	<1,000
Tert-Butyl Alcohol	<1,000	<1,000	<1,000	<1,000	<1,000
Aldehydes					
Acetaldehyde	<100	<100	<100	<100	<100
Butanal	<100	<100	<100	<100	<100
Crotonaldehyde	<100	<100	<100	<100	<100
Cyclohexanone	<100	<100	<100	<100	<100
Decanal	<100	<100	<100	<100	<100
Formaldehyde	<100	<100	<100	<100	<100
Heptanal	<100	<100	<100	<100	<100
Hexanal	<100	<100	<100	<100	<100
m-Tolualdehyde	<100	<100	<100	<100	<100
Nonanal	<100	<100	<100	<100	<100
Octanal	<100	<100	<100	<100	<100
Paraldehyde	<100	<100	<100	<100	<100
Pentanal	<100	<100	<100	<100	<100
Propanal	<100	<100	<100	<100	<100
Organic Acids					
Acetic Acid	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-119[1]		GMSB-122[1]	GMSB-123	MPMW-4
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/18/03	08/17/03	09/08/03	09/09/03	02/26/02
Sample ID	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150	GWMPMW-4 (2/26/02)
Alcohols					
2-Pentanone	<1,000	<1,000	<1,000	<1,000	<1,000
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<5,000	<5,000	<5,000	<5,000	NA
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	<1,000	<1,000	<1,000	<1,000	<1,000
n-Butanol	<1,000	<1,000	27,000	<1000	<1000
n-Propanol	<1,000	<1,000	<1000	<1000	<1000
Tert-Butyl Alcohol	<1,000	<1,000	<1000	<1000	<1000
Aldehydes					
Acetaldehyde	<100	<100	<100	<100	NA
Butanal	<100	<100	<100	<100	NA
Crotonaldehyde	<100	<100	<100	<100	NA
Cyclohexanone	<100	<100	<100	<100	NA
Decanal	<100	<100	<100	<100	NA
Formaldehyde	<100	<100	<100	<100	NA
Heptanal	<100	<100	<100	<100	NA
Hexanal	<100	<100	160	<100	NA
m-Tolualdehyde	<100	<100	380	<100	NA
Nonanal	<100	<100	<100	<100	NA
Octanal	<100	<100	<100	<100	NA
Paraldehyde	<100	<100	<100	<100	NA
Pentanal	<100	<100	<100	100	NA
Propanal	<100	<100	<100	<100	NA
Organic Acids					
Acetic Acid	<1,000	<1,000	180,000	<1,000	<500
Ethylacetate	<5,000	<5,000	<5,000	<5,000	<5,000

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-5		MW-8			UG-2		UG-4	
Top of Screen Depth (ft bls)	83	83	133	133	133	48	48	103	103
Sample Date	10/22/98	04/30/99	10/24/98	05/03/99	05/12/04	10/27/98	05/03/99	10/23/98	05/02/99
Sample ID	GWMW-5	GWMW-5	GWMW-8	GWMW-8	GWMW-8 (5/12/04)	GWUG-2	GWUG-2	GWUG-4	GWUG-4
Alcohols									
2-Pentanone	NA	NA	NA	NA	<1,000	NA	NA	NA	NA
Ethanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Ethylene glycol	<20,000	<20,000	<40,000 M	<20,000 J	<5,000	82,000	<20,000	<20,000	<20,000 J
Isobutanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Isopropanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
Methanol	1,300	<800	<800	<800	2,000	<800	<800	<800	<800
n-Butanol	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000
n-Propanol	NA	R	NA	R	<1,000	NA	R	NA	R
Tert-Butyl Alcohol	NA	R	NA	R	<1,000	NA	R	NA	R
Aldehydes									
Acetaldehyde	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Butanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Crotonaldehyde	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Cyclohexanone	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Decanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Formaldehyde	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Heptanal	<100 J	<100	<100 J	<100	81 J	<100	<100	<100 J	<100
Hexanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
m-Tolualdehyde	<100 J	<100	130 J	<100	140	<100	<100	<100 J	<100
Nonanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Octanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Paraldehyde	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Pentanal	<100 J	<100	<100 J	<100	87 J	<100	<100	<100 J	<100
Propanal	<100 J	<100	<100 J	<100	<100	<100	<100	<100 J	<100
Organic Acids									
Acetic Acid	260	<500	2,500	<500	<500	210	<500	<200	<500
Ethylacetate	NA	NA	NA	NA	<5,000	NA	NA	NA	NA

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring Top of Screen Depth (ft bls) Sample Date Sample ID	Residental Direct Contact Criteria	Residential Indoor Air Criteria	Residential Drinking Water Criteria	Final Acute Value Criteria	Final Chronic Value Criteria	Groundwater Surface Water Interface Criteria
Alcohols						
2-Pentanone	--	--	--	--	--	--
Ethanol	1,000,000,000 (I) S	(I) NLV	1,900,000 (I)	NLS	NLS	(I) --
Ethylene glycol	1,000,000,000 S	NLV	15,000	3,400,000	190,000	190,000 X
Isobutanol	25,000,000 (I)	76,000,000 (I) S	2300 (I)	--	--	(I) --
Isopropanol	13,000,000 (I)	(I) NLV	470 (I)	1,000,000	57,000	57,000 (I) X
Methanol	29,000,000 S	29,000,000 S	3,700	2,700,000	590,000	480
n-Butanol	8,800,000 (I)	(I) NLV	950 (I)	--	--	(I) --
n-Propanol	28,000,000 (I)	(I) NLV	1400 (I)	--	--	(I) --
Tert-Butyl Alcohol	79,000,000	1,000,000,000 D,S	3,900	--	--	NA
Aldehydes						
Acetaldehyde	42,000,000 (I)	1,100,000 (I)	950 (I)	2,400	130	130 (I)
Butanal	--	--	--	--	--	--
Crotonaldehyde	--	--	--	--	--	--
Cyclohexanone	23,000,000 S	1,500	33,000	--	--	--
Decanal	--	--	--	--	--	--
Formaldehyde	30,000,000	63,000	1,300	2,100	120	120
Heptanal	--	--	--	--	--	--
Hexanal	--	--	--	--	--	--
m-Tolualdehyde	--	--	--	--	--	--
Nonanal	--	--	--	--	--	--
Octanal	--	--	--	--	--	--
Paraldehyde	--	--	--	--	--	--
Pentanal	--	--	--	--	--	--
Propanal	--	--	--	--	--	--
Organic Acids						
Acetic Acid	180,000,000	NLV	4,200	pH[(2)]	pH[(2)]	1,000 M
Ethylacetate	64,000,000 (I) S	64,000,000 (I) S	6,600 (I)	--	--	(I) --

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Table 4-12. Summary of Alcohols/Aldehydes/Acetic Acid Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results are reported in micrograms per liter (µg/L).

<	Less than detection limit.
--	Not applicable.
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
Italics	Indicates a value above the Final Acute Value Criteria (Michigan Act 451, Part 4, Rule 57, December 11, 2006).
(1)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value. Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 451, Part 4, Rule 57, December 11, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
B	Constituent was also detected in laboratory blank.
ft bls	Feet below land surface.
I, J	Estimated result.
M	Matrix interference reported by laboratory.
NA	Not analyzed.
R	Rejected result.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

D	Calculated criterion exceeds 100%, therefore it is reduced to 100%.
I	Chemical may exhibit the characteristic of ignitability, as defined in 40 CFR 261.21.
M	Calculated criterion is below the analytical method detection limit (MDL).
NLS	A literature search has not been conducted.
NLV	Chemical is not likely to volatilize under most soil conditions.
pH[(2)]	The Final Acute Value and Final Chronic Value Criteria for acetic acid are based on the pH of the groundwater sample, which was collected concurrently with the acetic acid analyses, and the following equations: FCV = EXP (0.2732 * (pH) + 7.0362) FAV = EXP (0.2732 * (pH) + 9.9265)
S	Criterion defaults to the chemical-specific water solubility limit.
X	The GSI criterion shown is not protective for surface water that is used as a drinking water source.

Table 4-13. Summary of Constituents Detected in Groundwater with Concentrations Higher than the Michigan Residential Drinking Water Criteria, Ford-Kingsford Products Facility, Kingsford, Michigan.

Compounds	Range of Concentrations Higher than Critiera (µg/L)		Monitoring Well with Highest Concentration
VOC			
Acetone	3,200	750	GM-32
Acrylonitrile	14	14	GM-26B
Benzene	65	5.2	BR-2
cis-1,2-Dichloroethene	93	93	GM-40B
Diethylether	64	11	GM-38B
Methylene chloride	17	5.6	GM-2B
Tetrachloroethene	11	5.3	GM-73, GM-15
Tetrahydrofuran	1,400	160	MW-8
Trichloroethene	16	5.9	GM-13
SVOC			
2,4-Dimethylphenol	9,200	380	GM-32
2,4-Dimethylphenol/2,5-Dimethylphenol	5,200	430	GM-72A
2,6-Dimethylphenol	2,000	5.7	GM-25B
2-Methylphenol	11,000	81	GM-32
2-Nitrophenol	650	540	GM-72
3,4-Dimethylphenol	1,700	39	GM-72
3-Methylphenol	15,000	110	GM-32
3-Methylphenol/4-Methylphenol(m&p-cresol)	16,000	570	GM-25B
4-Methylphenol	22,000	110	GM-2B, GM-13
Anthracene	98	98	GM-2B
Benzo(a)anthracene	7.6	7.6	GM-25C
Benzo(a)pyrene	120	7.2	GM-2B
Benzo(b)fluoranthene	9.2	5.7	GM-25C
Benzo(g,h,i)perylene	410	1.2	GM-2B
Benzo(k)fluoranthene	33	1.9	GM-26C
bis(2-Ethylhexyl)phthalate	200	6.2	GM-2A
Carbazole	110	110	GM-2B
Chrysene	9.3	9.3	GM-25C
Dibenzo(a,h)anthracene	360	2.1	GM-2B
Hexachlorobenzene	81	81	GM-2B
Indeno(1,2,3-c,d)pyrene	330	2.2	GM-2B
Phenanthrene	100	100	GM-2B
Phenol	21,000	4,500	GM-13
Inorganics/Metals			
Chloride	290,000	260,000	GM-72A
Nitrogen, Ammonia	16,000	16,000	GM-72
Nitrogen, Nitrate	40,000	40,000	GM-20
Sulfate	2,600,000	260,000	BR-5B
Aluminum	74,100	52	GM-20
Antimony	8.7	8.7	GM-62C
Arsenic	170	11	GM-32
Barium	2,600	2,100	GM-25B
Cadmium	41	6.5	UG-4
Chromium	967	120	GM-2B
Cobalt	311	311	GM-20

Table 4-13. Summary of Constituents Detected in Groundwater with Concentrations Higher than the Michigan Residential Drinking Water Criteria, Ford-Kingsford Products Facility, Kingsford, Michigan.

Compounds	Range of Concentrations Higher than Critiera (µg/L)		Monitoring Well with Highest Concentration
Inorganics/Metals (con't)			
Copper	1,540	1540	GM-20
Iron	617,000	310	BR-2
Iron-DISS	180,000	310	GM-32
Lead	47	5.3	UG-4
Magnesium	570,000	410,000	GM-25B
Manganese	14,000	50.5	BR-2
Mercury	14	14	GM-36
Nickel	604	120	GM-20
Sodium	170,000	130,000	GM-72A
Thallium	47	22	UG-4
Vanadium	200	5	GM-32
Alochols			
1,4-Dioxane	600	600	GM-26C
Acetonitrile	1,700	1,700	GM-32
Ethylene glycol	290,000	35,000	GM-25B
Isobutanol	19,000	3,000	GM-59
Isopropanol	1,000,000	630	GM-40B
Methanol	140,000	6,800	GM-32
n-Butanol	1,500,000	1,000	GM-40B
Aldehydes			
Acetaldehyde	3,600	1,100	GM-32
Organic Acids			
Acetic Acid/Acetate	15,000,000	4,800	GM-37B

Table 4-14. Summary of Whole Effluent Toxicity Testing Results[a], Ford-Kingsford Products Facility, Kingsford, Michigan.

			Whole Effluent Toxicity Test (TU_A)	
Well	Date	Laboratory	Fathead minnow	*Daphnia magna*
GM-5	11/30/99	AScI	<1.0	3.6
GM-5	08/15/00	NEB	<1.0	1.0
GM-5	09/20/00	NEB	1.5	<1.0
GM-6	02/29/00	AScI	<1.0	1.3
GM-6	02/29/00	NEB (for MDEQ)	<1.0	<1.0
GM-6	07/19/00	NEB	<1.0	<1.0
GM-6	09/25/00	NEB	<1.0	<1.0
GM-8	10/21/99	AScI	<1.0	<1.0
GM-9	03/07/00	AScI	<1.0	<1.0
GM-25A	12/01/99	AScI	1.6	<1.0
GM-25A	08/21/00	NEB	1.2	1.2
GM-25A	08/25/03	NEB	1.2	1.8
GM-25B	07/13/99	MDEQ	14	16
GM-25B	08/25/99	MDEQ	9.7	8.3
GM-25B	10/20/99	AScI	7.7	5.6
GM-25C	08/02/00	NEB	<1.0	<1.0
GM-26A	11/29/99	AScI	1.4	1.8
GM-26A	11/29/99	MDEQ	NT	2.1
GM-26A	08/16/00	NEB	1.0	1.7
GM-26A	09/02/03	NEB	<1.0	1.0
GM-26B	11/30/99	AScI	<1.0	1.7
GM-26B	11/30/99	MDEQ	NT	<1.0
GM-26B	07/18/00	NEB	<1.0	<1.0
GM-26C	11/30/99	AScI	2.1	1.4
GM-26C	08/16/00	NEB	1.7	1.3
GM-26C	09/03/03	NEB	1.7	4.0
GM-27A	12/01/99	AScI	1.8	3.7
GM-27A	08/25/03	NEB	1.5	3.1
GM-27B	07/18/00	NEB	<1.0	<1.0
GM-27C	08/07/00	NEB	<1.0	<1.0
GM-28A	02/29/00	AScI	<1.0	1.3
GM-28A	07/19/00	NEB	<1.0	<1.0
GM-28B	3/1/00b	AScI	<1.0	<1.0
GM-29	02/29/00	AScI	<1.0	<1.0
GM-29	02/29/00	NEB (for MDEQ)	<1.0	<1.0
GM-31	10/09/00	NEB	<1.0	<1.0
GM-64A	10/03/00	NEB	<1.0	<1.0
GM-64B	07/24/00	NEB	<1.0	<1.0
GM-64B	10/04/00	NEB	<1.0	<1.0
GM-66A	07/18/00	NEB	<1.0	<1.0
GM-66B	07/19/00	NEB	<1.0	<1.0
GM-77	10/06/03	NEB	<1.0	<1.0
GM-78	10/06/03	NEB	<1.0	<1.0
GM-79	10/06/03	NEB	<1.0	<1.0

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Table 4-14. Summary of Whole Effluent Toxicity Testing Results[a], Ford-Kingsford Products Facility, Kingsford, Michigan.

Seep	Date	Laboratory	Whole Effluent Toxicity Test (TU_A)	
			Fathead minnow	*Daphnia magna*
SP-1	05/16/00	NEB	<1.0	<1.0
KF-CA-2[c]	03/13/00	MDEQ	NT	19
SP-2	06/27/00	NEB	<1.0	1.0
SP-2	06/10/03	NEB	<1.0	<1.0
SP-2	05/17/04	NEB	<1.0	<1.0
GSI-1	07/25/01	NEB	<1.0	<1.0
GSI-1	07/25/01	NEB (for MDEQ)	<1.0	<1.0
Seep-2[d]	07/25/01	NEB	<1.0	1.4
Seep-2	07/25/01	NEB (for MDEQ)	<1.0	<1.0

Results reported in acute toxicity units (TU_A).

<	Less than detection limit.
a	Data are for toxicity tests conducted within required holding time.
AsCI	AsCI Corporation
b	Fathead minnow test initiated 3/7/00 following re-sampling.
c	Seep samples KF-CA-2 and SP-2 were collected from the same location.
d	Sampling date for the *Daphnia magna* test was 7/27/2001.
MDEQ	Michigan Department of Environmental Quality.
NEB	New England Bioassay
NR	Not reported.
NT	Not tested.

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water								
Sample Date	07/23/01	07/25/01			02/28/00				05/22/02
Sample I.D.	AGM-GSI-1	AGM-GSI-1	AGM-SEEP-2	AGM-SEEP-2-DL	KF-CA-1	KF-CA-2	KF-CA-3	KF-CA-4	Sample-1
VOCs									
1,2,4-Trimethylbenzene	<1	NA	0.8 J	NA	<1.0	1.4	<1.0	<1.0	<1.0
1,3,5-Trimethylbenzene	<1	NA	<1	NA	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	NA	<50	NA	<5.0	<5.0	<5.0	5.3	<25
Benzene	1.1	NA	5.9	NA	2.5	13	<1.0	2.8	5.2
Carbon disulfide	<5	NA	<5	NA	<5.0	<5.0	<5.0	<5.0	<5.0
Chloromethane	0.99 J	NA	<1	NA	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1	NA	<1	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	NA	<10	NA	<10	18	<10	<10	<10
Ethylbenzene	<1	NA	1.6	NA	<1.0	2.9	<1.0	<1.0	1.4
Methyl iodide	<5	NA	<5	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Naphthalene	NA	NA	NA	NA	5.4	6.6	<5.0	5.4	<5.0
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	NA	<100
Toluene	1.2	NA	5.9	NA	2.6	9.1	<1.0	2.9	4.8
Xylene, o	NA	NA	NA	NA	1.4	4.5	<1.0	1.3	2.2
Xylenes (total)	<3	NA	5.4	NA	NA	NA	NA	NA	NA
Xylenes, m+p	NA	NA	NA	NA	<2.0	5	<2.0	<2.0	3
SVOCs									
2,3-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	33	NA	460 D	460 D	120	800	<5.0	<24	160
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	<5	NA	<5	<20	14	21	<5.0	<5.0	<5.0
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5	NA	<5	<20	66	280	<5.0	<46	<5.0
Benzo(a)anthracene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Benzo(a)pyrene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Benzo(b)fluoranthene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Benzo(g,h,i)perylene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Benzo(k)fluoranthene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Chrysene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Di-n-butylphthalate	0.5 J	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water								
Sample Date	07/23/01	07/25/01			02/28/00				05/22/02
Sample I.D.	AGM-GSI-1	AGM-GSI-1	AGM-SEEP-2	AGM-SEEP-2-DL	KF-CA-1	KF-CA-2	KF-CA-3	KF-CA-4	Sample-1
SVOC (continued)									
Indeno(1,2,3-c,d)pyrene	<5	NA	<5	<20	<5.0	<13	<5.0	<5.0	<5.0
Naphthalene	<5	NA	2.6 J	<20	<5.0	<13	<5.0	<5.0	<5.0
Metals									
Aluminum	<60	NA	100 B	NA	<50	83	<50	<50	NA
Arsenic	<11	NA	58	NA	36	44	19	27	17
Arsenic-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	8.9
Barium	210	NA	930	NA	520	740	86	588	501*
Barium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	439
Calcium	55,000	NA	160,000	NA	115,000	167,000	47,000	149,000	NA
Calcium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	<0.7	NA	<1.4	NA	1.4	2.3	<1.0	1.6	1.1
Chromium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	1.2
Cobalt	1.3 B	NA	3.1 B	NA	<10	<10	<10	<10	NA
Cobalt-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	8.6 B	NA	<25	NA	1.1	1.1	<1.0	1	<1.0
Iron	6,300	NA	29,000	NA	20,400	26,900	15,200	15,500	NA
Iron-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	<3	NA	<3	NA	<1.0	<1.0	<1.0	<1.0	<1.0
Magnesium	31,000	NA	110,000	NA	64,000	135,000	19,000	96,000	NA
Magnesium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	300	NA	220	NA	2,370	403	11,400	1,750	NA
Manganese-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	1.5 B	NA	<25	NA	5.2	13	2.5	6.9	NA
Nickel-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	1,900	NA	4,400	NA	2,100	3,400	940	2,600	NA
Potassium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	<0.2	NA	<0.2	NA	0.5	0.4	<0.2	<0.2	<0.2
Sodium	4,300	NA	13,000 J	NA	7,200	14,000	2,500	11,000	NA
Sodium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Titanium	3 B	NA	7.4 B	NA	<100	<100	<100	<100	NA
Titanium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	1.3 B	NA	<4.5	NA	<10	<10	<10	<10	NA
Vanadium-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water								
Sample Date	07/23/01	07/25/01			02/28/00				05/22/02
Sample I.D.	AGM-GSI-1	AGM-GSI-1	AGM-SEEP-2	AGM-SEEP-2-DL	KF-CA-1	KF-CA-2	KF-CA-3	KF-CA-4	Sample-1
Metals (continued)									
Zinc	11 B	NA	<4.5	NA	<10	13	<10	10	<10
Zinc-Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<10
Inorganics									
Alkalinity	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, (Ammonia)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silica, Dissolved	35,000	NA	52,000	NA	NA	NA	NA	NA	NA
Alcohols									
Ethylene glycol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	<1000	NA	<1000	NA	<800	<800	<800	<800	<800
Aldehydes									
Acetaldehyde	<100	NA	<100	NA	<100	170	<100	<100	NA
m-Tolualdehyde	<100	NA	<100	NA	<100	300	<100	<100	NA
Octanal	<100	NA	<100	NA	<100	<100	<100	<100	NA
Organic Acids									
Acetic Acid	<500	NA	<500	NA	NA	NA	NA	NA	1,100
Miscellaneous									
Biochemical Oxygen Demand	NA	2,500	20,000	NA	16,000	34,000	13,000	14,000	21,000
Chemical Oxygen Demand	68,000	NA	210,000	NA	34,000	8,700	15,000	32,000	25,000
Total Organic Carbon	27,000	NA	62,000	NA	36,000	119,000	8,700	64,000	71,000
Hardness as $CaCO_3$	NA	NA	NA	NA	NA	NA	NA	NA	720,000
Methane	***1,200***	NA	***23,400***	NA	NA	NA	NA	NA	NA
Suspended Solids	15,000 J	NA	68,000 J	NA	NA	NA	NA	NA	NA
Specific Gravity	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)								
Sample Date	05/22/02	05/30/97		03/07/00	03/13/00	05/16/00	06/02/00	06/27/00	
Sample I.D.	Sample-2	Seep	GBSL-1/0530 DUP	Seep #2	Seep #2	SP-1	SP-2 WWTP	SP-2	SP-2-DL
VOCs									
1,2,4-Trimethylbenzene	<1.0	NA	NA	1.2	1.5	<1	NA	1.1	NA
1,3,5-Trimethylbenzene	<1.0	NA	NA	<1	<1	<1	NA	0.6 J	NA
2-Butanone (MEK)	<25	<25 J	NA	<5	<5	<50	NA	<50	NA
Benzene	3.6	<2.5 J	NA	11	12	1.4	NA	11	NA
Carbon disulfide	<5.0	70 J	NA	<5	<5	<5	NA	<5	NA
Chloromethane	<1.0	<2.5 J	NA	<1	<1	<1 J	NA	<1	NA
cis-1,2-Dichloroethene	<1.0	<2.5 J	NA	<1	<1	<1	NA	0.69 J	NA
Diethylether	<10	NA	NA	14	14	<10	NA	16 J	NA
Ethylbenzene	<1.0	<2.5 J	NA	2.7	3.1	0.53 J	NA	3	NA
Methyl iodide	<1.0	NA	NA	<1	<1	<5 J	NA	<5	NA
Naphthalene	<5.0	NA	NA	7.2	5.2	NA	NA	NA	NA
Tetrahydrofuran	<100	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	3.3	<2.5 J	NA	8.5	8.9	1.3	NA	9.2	NA
Xylene, o	1.4	NA	NA	4.3	4.4	NA	NA	NA	NA
Xylenes (total)	NA	<2.5 J	NA	NA	NA	1.7 J	NA	8.9	NA
Xylenes, m+p	2	NA	NA	5.3	5.7	NA	NA	NA	NA
SVOCs									
2,3-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	83	<5	NA	540	630	56	NA	590 D	590 D
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	<5.0	<5	NA	<13	<25	<5	NA	<5	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	NA	NA	62	60	<5	NA	<5	<10
Benzo(a)anthracene	<5.0	<5	NA	<13	<25	<5	NA	<5	1.6 DJ
Benzo(a)pyrene	<5.0	<5	NA	<13	<25	<5	NA	<5	2.1 DJ
Benzo(b)fluoranthene	<5.0	<5	NA	<13	<25	<5	NA	<5	2.1 DJ
Benzo(g,h,i)perylene	<5.0	<5	NA	<13	<25	<5	NA	<5	<10
Benzo(k)fluoranthene	<5.0	<5	NA	<13	<25	<5	NA	<5	2 DJ
bis(2-Ethylhexyl)phthalate	<5.0	<5	NA	<13	<25	<5	NA	<5	6.7 DJB
Chrysene	<5.0	<5	NA	<13	<25	<5	NA	<5	2 DJ
Dibenzo(a,h)anthracene	<5.0	<5	NA	<13	<25	<5	NA	<5	<10
Di-n-butylphthalate	<5.0	<5	NA	<13	<25	0.86 J	NA	<5	<10

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)								
Sample Date	05/22/02	05/30/97		03/07/00	03/13/00	05/16/00	06/02/00	06/27/00	
Sample I.D.	Sample-2	Seep	GBSL-1/0530 DUP	Seep #2	Seep #2	SP-1	SP-2 WWTP	SP-2	SP-2-DL
SVOC (continued)									
Indeno(1,2,3-c,d)pyrene	<5.0	<5	NA	<13	<25	<5	NA	<5	1.2 DJ
Naphthalene	<5.0	<5	NA	<13	<25	<5	NA	<5	<10
Metals									
Aluminum	NA	NA	NA	230	<50	NA	NA	NA	NA
Arsenic	23	NA	NA	63	62	NA	NA	NA	NA
Arsenic-Dissolved	7.9	NA	NA	NA	NA	36 J	NA	7.5 B	NA
Barium	508	NA	NA	829	791	NA	NA	NA	NA
Barium-Dissolved	402	NA	NA	NA	NA	550	NA	570	NA
Calcium	NA	NA	NA	160,000	157,000	NA	NA	NA	NA
Calcium-Dissolved	NA	NA	NA	NA	NA	91,000	NA	160,000	NA
Chromium	2.5	NA	NA	4.2	3.6	NA	NA	NA	NA
Chromium-Dissolved	2.6	NA	NA	NA	NA	<1.3	NA	0.76 B	NA
Cobalt	NA	NA	NA	<10	<10	NA	NA	NA	NA
Cobalt-Dissolved	NA	NA	NA	NA	NA	<10	NA	6.4 B	NA
Copper	2.5	NA	NA	<1	1.2	NA	NA	NA	NA
Iron	NA	NA	NA	30,900	32,200	NA	NA	NA	NA
Iron-Dissolved	NA	NA	NA	NA	NA	20,000	NA	260 J	NA
Lead	1.5	NA	NA	<1	<1	NA	NA	NA	NA
Magnesium	NA	NA	NA	133,000	133,000	NA	NA	NA	NA
Magnesium-Dissolved	NA	NA	NA	NA	NA	53,000	NA	130,000	NA
Manganese	NA	NA	NA	544	588	NA	NA	NA	NA
Manganese-Dissolved	NA	NA	NA	NA	NA	2,200	NA	440 J	NA
Nickel	NA	NA	NA	17	14	NA	NA	NA	NA
Nickel-Dissolved	NA	NA	NA	NA	NA	<25	NA	5.7 B	NA
Potassium	NA	NA	NA	4,100	3,700	NA	NA	NA	NA
Potassium-Dissolved	NA	NA	NA	NA	NA	2,700	NA	4,600	NA
Silver	<0.2	NA	NA	<0.2	1.4	NA	NA	NA	NA
Sodium	NA	NA	NA	14,000	13,000	NA	NA	NA	NA
Sodium-Dissolved	NA	NA	NA	NA	NA	6,600 J	NA	13,000	NA
Titanium	NA	NA	NA	<100	<100	NA	NA	NA	NA
Titanium-Dissolved	NA	NA	NA	NA	NA	1.8 B	NA	1.1 B	NA
Vanadium	NA	NA	NA	10	11	NA	NA	NA	NA
Vanadium-Dissolved	NA	NA	NA	NA	NA	<2.7	NA	<1.3	NA

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)								
Sample Date	05/22/02	05/30/97		03/07/00	03/13/00	05/16/00	06/02/00	06/27/00	
Sample I.D.	Sample-2	Seep	GBSL-1/0530 DUP	Seep #2	Seep #2	SP-1	SP-2 WWTP	SP-2	SP-2-DL
Metals (continued)									
Zinc	<10	NA	NA	<10	16	NA	NA	NA	NA
Zinc-Dissolved	<10	NA	NA	NA	NA	<20	NA	<20	NA
Inorganics									
Alkalinity	NA	NA	NA	NA	NA	410,000	NA	930,000	NA
Chloride	NA	NA	NA	NA	NA	4,400	NA	12,000	NA
Nitrogen, (Ammonia)	NA	NA	NA	NA	NA	85	170	37	NA
Ortho-Phosphate	NA	NA	NA	NA	NA	NA	390	NA	NA
Silica, Dissolved	NA	NA	NA	NA	NA	38,000	NA	53,000	NA
Alcohols									
Ethylene glycol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methanol	<800	NA	NA	<800	<800	<1,000	NA	<1,000 J	NA
Aldehydes									
Acetaldehyde	NA	NA	NA	130	110	<100 J	NA	<100 J	NA
m-Tolualdehyde	NA	NA	NA	100	<100	<100 J	NA	<100 J	NA
Octanal	NA	NA	NA	<100	<100	<100 J	NA	<100 J	NA
Organic Acids									
Acetic Acid	3,400	NA	NA	NA	NA	<500	NA	<500	NA
Miscellaneous									
Biochemical Oxygen Demand	22,000	3,000	2,000	46,000	16,000	<2,000	15,000	28,000	NA
Chemical Oxygen Demand	27,000	50,000	NA	318,000	323,000	53,000	290,000	290,000	NA
Total Organic Carbon	64,000	11,000	NA	90,000	97,000	21,000	NA	98,000	NA
Hardness as $CaCO_3$	708,000	NA	NA	NA	NA	450,000	NA	960,000	NA
Methane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Suspended Solids	NA	NA	NA	NA	NA	NA	92,000	NA	NA
Specific Gravity	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)		Residential Direct	Residential Indoor	Residential Drinking
Sample Date	06/10/03	05/17/04	Contact	Air	Water
Sample I.D.	SP2 (6/10/03)	SP2 (5/17/04)	Criteria	Criteria	Criteria
VOCs					
1,2,4-Trimethylbenzene	1.4	0.88 J	56,000 (I) S	56,000 (I) S	63 (I) E
1,3,5-Trimethylbenzene	<1.0	<1.0	61,000 (I) S	61,000 (I) S	72 (I) E
2-Butanone (MEK)	<10	2.4 J	240,000,000 (I) S	240,000,000 (I) S	13,000 (I)
Benzene	6.7	6.6	11,000 (I)	5,600 (I)	5 (I) A
Carbon disulfide	<1.0	<5.0	R	R	R
Chloromethane	<1.0	<1.0	490,000 (I)	8,600 (I)	260 (I)
cis-1,2-Dichloroethene	<1.0	0.63 J	200,000	93,000	70 A
Diethylether	<2.0	10	35,000,000	61,000,000 S	10 E
Ethylbenzene	2.4	1.6	170,000 (I) S	110,000 (I)	74 (I) E
Methyl iodide	<1.0	0.27 J	--	--	--
Naphthalene	NA	NA	31,000 S	31,000 S	520
Tetrahydrofuran	<5.0	7.6	1,600,000	6,900,000	95
Toluene	5.7	5.7	530,000 (I) S	530,000 (I) S	790 (I) E
Xylene, o	NA	NA	190,000 I,S	190,000 (I) S	280 I,E
Xylenes (total)	6.7	5.5	190,000 (I) S	190,000 (I) S	280 (I) E
Xylenes, m+p	NA	NA	190,000 I,S	190,000 I,S	280 I,E
SVOCs					
2,3-Dimethylphenol	<50	120	--	--	--
2,4-Dimethylphenol	NA	NA	520,000	NLV	370
2,4-Dimethylphenol/2,5-Dimethylphenol	300	340	520,000	NLV	370
2,6-Dimethylphenol	100	140	6,300	NLV	4.4
2-Methylphenol	<25	<20	810,000 J	J,NLV	370 J
3-Methylphenol/4-Methylphenol(m&p-cresol)	<25	<20	810,000	J,NLV	370 J
Benzo(a)anthracene	<25	<20	9.4 (Q) S,AA	(Q) NLV	2.1 (Q)
Benzo(a)pyrene	<25	<20	1 (Q) M,AA	(Q) NLV	5 (Q) A
Benzo(b)fluoranthene	<25	<20	1.5 (Q) S,AA	(Q) ID	1.5 (Q) S, AA
Benzo(g,h,i)perylene	7.3 JB	<20	1 M,AA	NLV	1 M
Benzo(k)fluoranthene	<25	<20	1 (Q) M,AA	(Q) NLV	1 (Q) M
bis(2-Ethylhexyl)phthalate	<25	<20	320 AA	NLV	6 A
Chrysene	<25	<20	1.6 (Q) S,AA	(Q) ID	1.6 (Q) S
Dibenzo(a,h)anthracene	6.0 JB	<20	2 (Q) M,AA	(Q) NLV	2 (Q) M
Di-n-butylphthalate	<25	<20	11000 S	NLV	880

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)		Residential Direct	Residential Indoor	Residential Drinking
Sample Date	06/10/03	05/17/04	Contact	Air	Water
Sample I.D.	SP2 (6/10/03)	SP2 (5/17/04)	Criteria	Criteria	Criteria
SVOC (continued)					
Indeno(1,2,3-c,d)pyrene	5.9 JB	<20	2 (Q) AA,M	(Q) NLV	2 (Q) M
Naphthalene	<25	<20	31,000 S	31,000 S	520
Metals					
Aluminum	<200	<200	64,000,000 (B)	(B) NLV	50 (B) V
Arsenic	39	27	4,300	NLV	10 A
Arsenic-Dissolved	39	32	4,300	NLV	10 A
Barium	650	500	14,000,000 (B)	(B) NLV	2,000 (B) A
Barium-Dissolved	620	610	14,000,000 (B)	(B) NLV	2,000 (B) A
Calcium	120,000	93,000	--	--	--
Calcium-Dissolved	110,000	110,000	--	--	--
Chromium	<5.0	0.77 B	460,000	NLV	100 A
Chromium-Dissolved	<5.0	0.63 B	460,000	NLV	100 A
Cobalt	<10	2.1 B	2,400,000	NLV	40
Cobalt-Dissolved	<10	2.6 B	2,400,000	NLV	40
Copper	<25	<25	7,400,000 (B)	(B) NLV	1,000 (B) E
Iron	23,000	17,000	58,000,000 (B)	(B) NLV	300 (B) E
Iron-Dissolved	22,000	20,000	58,000,000 (B)	(B) NLV	300 (B) E
Lead	<3.0	<3.0	0 (B) ID	(B) NLV	4 (B) L
Magnesium	89,000	72,000	1,000,000,000 (B) D	(B) NLV	400,000 (B)
Magnesium-Dissolved	86,000	87,000	1,000,000,000 (B) D	(B) NLV	400,000 (B)
Manganese	460	400	9,100,000 (B)	(B) NLV	50 (B) E
Manganese-Dissolved	440	480	9,100,000 (B)	(B) NLV	50 (B) E
Nickel	<25	2.1 B	74,000,000 (B)	(B) NLV	100 (B) A
Nickel-Dissolved	<25	2.8 B	74,000,000 (B)	(B) NLV	100 (B) A
Potassium	4,000	3,200	--	--	--
Potassium-Dissolved	3,900	3,900	--	--	--
Silver	<0.20 WN	<0.20	1,500,000 (B)	(B) NLV	34 (B)
Sodium	13,000	9,400	1,000,000,000 D	NLV	120,000
Sodium-Dissolved	12,000	12,000	1,000,000,000 D	NLV	120,000
Titanium	<50	3.5 B	--	--	--
Titanium-Dissolved	<50	3.7 B	--	--	--
Vanadium	<20	2.6 B	970,000	NLV	4.5
Vanadium-Dissolved	<20	3.2 B	970,000	NLV	4.5

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Seep Water (continued)		Residential Direct	Residential Indoor	Residential Drinking
Sample Date	06/10/03	05/17/04	Contact	Air	Water
Sample I.D.	SP2 (6/10/03)	SP2 (5/17/04)	Criteria	Criteria	Criteria
Metals (continued)					
Zinc	<20	2.0 B	110,000,000 (B)	(B) NLV	2,400 (B)
Zinc-Dissolved	<20	1.3 B	110,000,000 (B)	(B) NLV	2,400 (B)
Inorganics					
Alkalinity	660,000	670,000	--	--	--
Chloride	7,900	8,800	ID	NLV	250,000 E
Nitrogen, (Ammonia)	320	160	ID	3,200,000	10,000 N
Ortho-Phosphate	<50	<50	--	--	--
Silica, Dissolved	43,000	40,000	--	--	--
Alcohols					
Ethylene glycol	<10,000	1,300 J	1,000,000,000 S	NLV	15,000
Methanol	<1,000	1,900	29,000,000 S	29,000,000 S	3,700
Aldehydes					
Acetaldehyde	<100	<100	42,000,000 (I)	1,100,000 (I)	950 (I)
m-Tolualdehyde	<100	45 J	--	--	--
Octanal	<100	13 J	--	--	--
Organic Acids					
Acetic Acid	<1000	220 J	180,000,000	NLV	4200
Miscellaneous					
Biochemical Oxygen Demand	9,100	11,000	--	--	--
Chemical Oxygen Demand	200,000	220,000	--	--	--
Total Organic Carbon	58,000	61,000	--	--	--
Hardness as $CaCO_3$	--	--	--	--	--
Methane	--	***9,240***	(K) ID	(K) K	(K) ID
Suspended Solids	--	--	--	--	--
Specific Gravity	--	1.015	--	--	--

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Table 4-15. Summary of Constituents Detected in Seep Water Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results reported in micrograms per liter (µg/L).

<	Less than detection limit.
	Indicates a value above the Residential and Commercial I Direct Contact Criteria (Operational Memorandum #1, January 23, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
1,200	Indicates a value above the Groundwater Flammability and Explosively Screening Level of 520 µg/L (Operational Memorandum 1, Attachment January 23, 2006).
--	Not applicable.
*	Duplicate analysis was not within control limits.
B	Constituent was also detected in laboratory blank.
D	Result was obtained from analysis of a dilution.
ft bls	Feet below land surface.
J	Estimated result.
K	Chemical may be flammable and/or explosive.
MEK	Methyl Ethyle Ketone.
N	Presumptive evidence of compound was identified (TICs only).
NA	Not analyzed.
W	Post-digestion spike for furnace A-A analysis is out of control limits while sample absorbance is less than 50% of spike absorbance.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

AA	Compound may be adsorbed to particulates rather than dissolved in water; filtered groundwater sample may be more appropriate for comparison to criteria.
A	State of Michigan Drinking Water Standard.
B	Background may be substituted if higher than the calculated cleanup criteria.
D	Calculated criterion exceeds 100%, therefore it is reduced to 100%.
E	Criterion is the aesthetic drinking water value.
I	Chemical may exhibit the characteristic of ignitability, as defined in 40 CFR 261.21.
J	Chemical may be present in several isomer forms. Isomer specific concentrations must be added together for comparison to criteria.
K	Chemical may be flammable and/or explosive.
L	Higher groundwater concentrations, (up to 15 µg/L) may be acceptable if the soil concentration is less than 400 ppm and groundwater migrating offsite will not result in unacceptable exposures.
M	Calculated criterion is below the analytical method detection limit (MDL).
NA	Criterion or values is not available.
NLV	Chemical is not likely to volatilize under most soil conditions.
R	Hazardous substance may exhibit the characteristic of reactivity as defined in 40 CFR 261.23.
S	Criterion defaults to the chemical-specific water solubility limit.
Q	Criterion for carcinogenic polycyclic aromatic hydrocarbons (PAHs) were developed using "relative potential potencies" (RFPs) to benzo(a)pyrene.

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
BR-3	127	1125.53	1128.21	09/11/05	82.48	1045.73	1/12/06	83.34	1044.87	0.86	0.86
GM-1	230	1121.79	1123.97	09/11/05	83.46	1040.51	1/12/06	83.81	1040.16	0.35	0.35
GM-3A	84	1119.54	1119.35	09/11/05	48.02	1071.33	1/12/06	48.54	1070.81	0.52	0.52
GM-3B	180	1119.61	1119.40	09/11/05	75.38	1044.02	1/12/06	75.58	1043.82	0.20	0.20
GM-5	260	1122.18	1125.58	09/11/05	85.71	1039.87	1/12/06	87.11	1038.47	1.40	1.38
GM-6	175	1124.07	1126.71	09/11/05	84.52	1042.19	1/12/06	85.36	1041.35	0.84	0.84
GM-8	89	1043.64	1046.43	09/11/05	11.28	1035.15	1/12/06	11.55	1034.88	0.27	0.27
GM-9	174	1053.04	1055.69	09/11/05	17.84	1037.85	1/12/06	18.26	1037.43	0.42	0.42
GM-10	180	1056.20	1055.86	09/11/05	17.11	1038.75	1/12/06	18.02	1037.84	0.91	0.91
GM-11	185	1067.84	1067.60	09/10/05	13.54	1054.06	1/12/06	13.62	1053.98	0.08	0.08
GM-21	15	1055.99	1059.06	09/11/05	9.93	1049.13	1/12/06	7.32	1051.74	-2.61	-2.61
GM-22	16	1064.23	1066.70	09/11/05	12.59	1054.11	1/12/06	8.41	1058.29	-4.18	-4.18
GM-23	14	1055.90	1058.44	09/11/05	10.32	1048.12	1/12/06	8.41	1050.03	-1.91	-1.91
GM-24A	81	1099.38	1098.96	09/11/05	59.02	1039.94	1/12/06	59.17	1039.79	0.15	0.15
GM-24C	198	1099.22	1098.73	09/11/05	58.62	1040.11	1/12/06	58.78	1039.95	0.16	0.16
GM-25A	29	1047.71	1050.08	09/10/05	12.55	1037.53	1/12/06	13.82	1036.26	1.27	0.94
GM-25B	108	1047.85	1049.99	09/10/05	11.15	1038.84	1/12/06	13.85	1036.14	2.70	2.51
GM-25C	216	1047.94	1049.87	09/10/05	10.58	1039.29	1/12/06	12.74	1037.13	2.16	1.97
GM-26A	40	1047.31	1049.56	NA	**12.36**	**1037.20**	1/12/06	14.05	1035.51	1.69	0.99
GM-26B	111	1047.17	1049.63	09/10/05	12.03	1037.60	1/12/06	13.52	1036.11	1.49	1.23
GM-26C	170	1047.27	1049.56	NA	**11.49**	**1038.07**	1/12/06	13.81	1035.75	2.32	2.07
GM-27A	40	1052.45	1054.96	09/10/05	17.00	1037.96	1/12/06	18.12	1036.84	1.12	0.42
GM-27B	155	1052.61	1055.30	09/10/05	16.90	1038.40	1/12/06	17.81	1037.49	0.91	0.65
GM-27C	220	1052.53	1055.00	09/10/05	16.11	1038.89	1/12/06	16.88	1038.12	0.77	0.51
GM-28A	50	1062.08	1064.55	09/11/05	26.20	1038.35	1/12/06	26.68	1037.87	0.48	0.48
GM-28B	130	1061.85	1064.39	09/11/05	26.26	1038.13	1/12/06	26.76	1037.63	0.50	0.50
GM-29	65	1053.15	1055.80	09/11/05	18.83	1036.97	1/12/06	19.19	1036.61	0.36	0.36
GM-31	115	1121.73	1124.22	09/11/05	83.90	1040.32	1/12/06	84.74	1039.48	0.84	0.74
GM-34A	40	1088.08	1088.18	09/11/05	18.04	1070.14	1/12/06	18.63	1069.55	0.59	0.59
GM-34B	95	1088.01	1088.16	09/11/05	45.94	1042.22	1/12/06	46.16	1042.00	0.22	0.22
GM-38A	105	1097.22	1096.86	09/11/05	55.74	1041.12	1/12/06	55.95	1040.91	0.21	0.21

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
GM-38B	170	1097.30	1096.86	09/11/05	54.16	1042.70	1/12/06	54.34	1042.52	0.18	0.18
GM-38C	210	1097.29	1096.96	09/11/05	54.35	1042.61	1/12/06	54.53	1042.43	0.18	0.18
GM-53A	89	1103.76	1106.73	09/11/05	67.17	1039.56	1/12/06	67.65	1039.08	0.48	0.48
GM-53B	205	1103.83	1106.75	09/11/05	66.62	1040.13	1/12/06	66.92	1039.83	0.30	0.30
GM-57	86	1130.81	1130.29	09/11/05	77.38	1052.91	1/12/06	78.14	1052.15	0.76	0.76
GM-58	85	1130.90	1130.60	09/11/05	77.69	1052.91	1/12/06	77.79	1052.81	0.10	0.10
GM-59	124	1129.97	1131.81	09/11/05	80.91	1050.90	1/12/06	81.12	1050.69	0.21	0.21
GM-62A	100	1124.78	1127.69	09/11/05	54.72	1072.97	1/12/06	55.04	1072.65	0.32	0.32
GM-62B	205	1124.74	1128.05	09/11/05	75.80	1052.25	1/12/06	76.33	1051.72	0.53	0.53
GM-62C	325	1124.77	1128.00	09/11/05	75.83	1052.17	1/12/06	76.40	1051.60	0.57	0.57
GM-63A	50	1049.72	1052.27	09/10/05	14.68	1037.59	1/12/06	16.25	1036.02	1.57	0.87
GM-63B	110	1049.72	1052.11	09/10/05	14.84	1037.27	1/12/06	15.02	1037.09	0.18	-0.08
GM-65	130	1065.21	1068.21	09/10/05	28.61	1039.60	1/12/06	30.30	1037.91	1.69	1.50
GM-66A	37	1045.70	1048.16	09/10/05	9.62	1038.54	1/12/06	9.92	1038.24	0.30	0.30
GM-66B	135	1045.72	1048.16	09/10/05	8.38	1039.78	1/12/06	9.52	1038.64	1.14	1.14
GM-76	13	1056.36	1059.96	09/11/05	9.64	1050.32	1/12/06	5.24	1054.72	-4.40	-4.40
GM-77	110	1043.06	1045.26	09/10/05	5.91	1039.35	1/12/06	7.51	1037.75	1.60	1.48
GM-78	30	1049.24	1051.72	09/10/05	14.29	1037.43	1/12/06	15.09	1036.63	0.80	0.47
GM-79	35	1052.81	1052.37	09/10/05	14.32	1038.05	1/12/06	15.14	1037.23	0.82	0.12
GM-84	82	1052.72	1055.14	09/10/05	15.26	1039.88	1/12/06	15.88	1039.26	0.62	0.62
GM-87A	42	1054.90	1054.16	NA	NA	NA	NA	NA	NA	NA	NA
GM-87B	135	1055.01	1054.27	NA	NA	NA	NA	NA	NA	NA	NA
GMEW-1	30	1039.49	1041.69	09/10/05	4.08	1037.61	1/12/06	5.60	1036.09	1.52	NA
GMEW-2	36	1049.53	1050.44	NA	**12.00**	**1038.44**	1/12/06	13.12	1037.32	1.12	NA
GMEW-3	125	1065.40	1066.79	NA	**27.14**	**1039.65**	1/12/06	28.44	1038.35	1.30	NA
GMEW-4R	132	1047.50	1047.32	09/10/05	8.55	1038.77	1/12/06	78.98	968.34	70.43	NA
GMEW-5	53	1066.13	1068.33	09/10/05	30.01	1038.32	1/12/06	31.01	1037.32	1.00	NA
GMEW-6	51	1060.43	1062.18	09/10/05	23.98	1038.20	1/12/06	24.93	1037.25	0.95	NA
GMEW-8	176	1044.08	1046.47	09/10/05	8.33	1038.14	1/12/06	9.91	1036.56	1.58	NA
GMEWA-1	41	1054.15	1052.66	09/10/05	14.42	1038.24	1/12/06	15.32	1037.34	0.90	NA
GMEWA-2	41	1053.69	1052.62	09/10/05	14.42	1038.20	1/12/06	15.42	1037.20	1.00	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
GMEWA-3	40	1053.41	1051.89	09/10/05	14.71	1037.18	1/12/06	14.84	1037.05	0.13	NA
GMEWA-4	35	1049.23	1047.94	09/10/05	9.81	1038.13	1/12/06	11.16	1036.78	1.35	NA
GMEWA-5	31	1042.35	1041.54	09/10/05	3.64	1037.90	1/12/06	7.17	1034.37	3.53	NA
GMEWA-6	32	1043.88	1042.41	09/10/05	4.71	1037.70	1/12/06	11.05	1031.36	6.34	NA
GMEWA-7	32	1042.34	1041.88	09/10/05	4.41	1037.47	1/12/06	8.49	1033.39	4.08	NA
GMEWA-8	45	1041.58	1040.60	09/10/05	3.20	1037.40	1/12/06	6.05	1034.55	2.85	NA
GMEWA-9	40	1040.50	1039.96	09/10/05	2.61	1037.35	1/12/06	5.13	1034.83	2.52	NA
GMEWA-10	50	1041.42	1040.92	NA	**3.59**	**1037.33**	1/12/06	8.94	1031.98	5.35	NA
GMEWA-11	39	1043.25	1042.78	09/10/05	5.46	1037.32	1/12/06	8.69	1034.09	3.23	NA
GMEWA-12	43	1044.34	1043.72	09/10/05	6.46	1037.26	1/12/06	10.55	1033.17	4.09	NA
GMEWA-13	40	1045.04	1044.26	09/10/05	7.01	1037.25	1/12/06	10.20	1034.06	3.19	NA
GMEWA-14	55	1047.01	1045.48	09/10/05	8.25	1037.23	1/12/06	11.37	1034.11	3.12	NA
GMEWA-15	55	1047.09	1045.67	09/10/05	8.43	1037.24	1/12/06	11.79	1033.88	3.36	NA
GMEWA-16	55	1047.52	1046.23	09/10/05	9.01	1037.22	1/12/06	11.86	1034.37	2.85	NA
GMEWA-17	70	1047.92	1047.17	09/10/05	10.03	1037.14	1/12/06	15.18	1031.99	5.15	NA
GMEWA-18	33	1048.00	1046.77	09/10/05	9.68	1037.09	1/12/06	12.59	1034.18	2.91	NA
GMEWA-19	34	1048.79	1047.27	09/10/05	10.25	1037.02	1/12/06	14.32	1032.95	4.07	NA
GMEWA-20	34	1049.20	1047.93	09/10/05	10.90	1037.03	1/12/06	12.85	1035.08	1.95	NA
GMEWA-21	33	1049.47	1048.61	09/10/05	11.51	1037.10	1/12/06	14.99	1033.62	3.48	NA
GMEWA-22	34	1049.44	1048.42	09/10/05	11.36	1037.06	1/12/06	16.84	1031.58	5.48	NA
GMEWA-23	40	1049.29	1047.85	09/10/05	10.66	1037.19	1/12/06	14.70	1033.15	4.04	NA
GMEWA-24	42	1049.02	1046.74	09/10/05	9.39	1037.35	1/12/06	11.96	1034.78	2.57	NA
GMEWA-25	38	1049.22	1047.46	09/10/05	10.10	1037.36	1/12/06	12.89	1034.57	2.79	NA
GMEWA-26	37	1049.22	1048.05	09/10/05	10.40	1037.65	1/12/06	12.96	1035.09	2.56	NA
GMEWA-27	36	1048.96	1047.24	09/10/05	9.63	1037.61	1/12/06	9.76	1037.48	0.13	NA
GMEWA-28	40	1049.19	1047.98	09/10/05	10.43	1037.55	1/12/06	11.37	1036.61	0.94	NA
GMEWA-28A	38	1049.74	1048.65	09/10/05	11.15	1037.50	1/12/06	11.99	1036.66	0.84	NA
GMEWB-1	109	1049.17	1047.17	09/10/05	8.91	1038.26	1/12/06	11.19	1035.98	2.28	NA
GMEWC-1	143	1045.19	1044.28	09/10/05	4.63	1039.65	1/12/06	5.60	1038.68	0.97	NA
GMEWC-1A	162.5	1045.68	1044.27	09/10/05	4.54	1039.73	1/12/06	8.98	1035.29	4.44	NA
GMEWC-2	185	1043.87	1042.91	09/10/05	3.48	1039.43	1/12/06	5.58	1037.33	2.10	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
GMEWC-2A	192	1043.77	1042.51	09/10/05	3.10	1039.41	1/12/06	10.06	1032.45	6.96	NA
GMEWC-3	167	1046.70	1046.02	09/10/05	6.45	1039.57	1/12/06	13.06	1032.96	6.61	NA
GMEWC-4 (GMEW-9)	175	1048.91	1046.63	09/10/05	7.35	1039.28	1/12/06	24.30	1022.33	16.95	NA
GMEWC-5	190	1050.91	1049.86	09/10/05	10.65	1039.21	1/12/06	48.62	1001.24	37.97	NA
GMEWC-6	155	1048.72	1047.61	09/10/05	8.76	1038.85	1/12/06	91.47	956.14	82.71	NA
GMEWC-7	153	1049.56	1048.07	09/10/05	9.38	1038.69	1/12/06	51.42	996.65	42.04	NA
GMEWC-7A	155	1049.54	1047.64	09/10/05	9.02	1038.62	1/12/06	13.37	1034.27	4.35	NA
GMEWC-8	172	1047.03	1045.70	09/10/05	7.69	1038.01	1/12/06	30.35	1015.35	22.66	NA
GMEWC-8A	167	1047.30	1045.77	09/10/05	7.71	1038.06	1/12/06	9.91	1035.86	2.20	NA
GMEWC-9	124.7	1048.75	1047.56	09/10/05	8.85	1038.71	1/12/06	11.52	1036.04	2.67	NA
GMEWC-10	185	1049.35	1048.11	09/10/05	9.11	1039.00	1/12/06	91.37	956.74	82.26	NA
GMIM-1	24	1041.73	1044.50	09/10/05	6.31	1038.19	1/12/06	7.71	1036.79	1.40	0.70
GMIM-2	24	1041.73	1044.32	09/10/05	6.06	1038.26	1/12/06	7.40	1036.92	1.34	0.64
GMPZ-1	32	1050.11	1052.67	09/10/05	14.20	1038.47	1/12/06	15.41	1037.26	1.21	0.51
GMPZ-2	34	1050.68	1053.14	NA	**14.64**	**1038.50**	1/12/06	15.74	1037.40	1.10	0.39
GMPZ-3	22	1041.50	1044.08	09/10/05	5.85	1038.23	1/12/06	7.18	1036.90	1.33	0.63
GMPZ-5	55	1065.78	1068.54	09/10/05	30.23	1038.31	1/12/06	31.21	1037.33	0.98	0.28
GMPZ-6	46	1060.44	1063.36	09/10/05	25.05	1038.31	1/12/06	26.13	1037.23	1.08	0.75
GMPZ-7	193	1065.94	1068.58	09/10/05	28.92	1039.66	1/12/06	31.17	1037.41	2.25	2.06
GMPZ-8	145	1044.35	1047.50	09/10/05	9.26	1038.31	1/12/06	10.93	1036.57	1.74	1.03
GMPZA-1	32	1049.18	1051.97	09/10/05	14.30	1037.67	1/12/06	15.71	1036.26	1.41	1.07
GMPZA-2	33	1049.06	1051.74	09/10/05	14.37	1037.37	1/12/06	15.98	1035.76	1.61	1.24
GMPZA-3	35	1049.07	1051.77	09/10/05	14.46	1037.31	1/12/06	16.18	1035.59	1.72	1.33
GMPZA-4	34	1049.19	1051.81	09/10/05	14.61	1037.20	1/12/06	16.52	1035.29	1.91	1.49
GMPZA-5	33	1049.53	1052.00	09/10/05	14.60	1037.40	1/12/06	16.67	1035.33	2.07	1.16
GMPZA-6	30	1049.50	1052.13	09/10/05	14.85	1037.28	1/12/06	16.50	1035.63	1.65	1.16
GMPZA-7	30	1049.17	1051.80	09/10/05	14.71	1037.09	1/12/06	16.17	1035.63	1.46	0.94
GMPZA-8	24	1048.80	1051.64	09/10/05	14.36	1037.28	1/12/06	16.11	1035.53	1.75	1.19
GMPZA-9	28	1048.01	1049.94	09/10/05	12.88	1037.06	1/12/06	14.51	1035.43	1.63	1.04
GMPZA-10	35	1048.08	1050.70	09/10/05	13.53	1037.17	1/12/06	15.40	1035.30	1.87	1.25
GMPZA-11	34	1047.42	1050.11	09/10/05	12.91	1037.20	1/12/06	14.69	1035.42	1.78	1.13

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
GMPZA-12	34	1047.33	1049.73	09/10/05	12.54	1037.19	1/12/06	14.34	1035.39	1.80	1.12
GMPZA-13	40	1046.79	1049.43	09/10/05	12.20	1037.23	1/12/06	13.97	1035.46	1.77	1.07
GMPZA-14	30	1044.98	1047.74	09/10/05	10.50	1037.24	1/12/06	12.18	1035.56	1.68	0.98
GMPZA-15	36	1044.43	1047.13	09/10/05	9.85	1037.28	1/12/06	11.60	1035.53	1.75	1.05
GMPZA-16	35	1043.18	1045.77	09/10/05	8.47	1037.30	1/12/06	10.22	1035.55	1.75	1.05
GMPZA-17	35	1041.49	1044.97	NA	**8.71**	**1037.33**	1/12/06	9.36	1035.61	1.72	1.02
GMPZA-18	30	1040.53	1043.15	09/10/05	5.82	1037.33	1/12/06	7.54	1035.61	1.72	1.02
GMPZA-19	30	1041.94	1044.61	09/10/05	7.27	1037.34	1/12/06	9.08	1035.53	1.81	1.11
GMPZA-20	25	1042.52	1045.31	09/10/05	7.81	1037.50	1/12/06	9.61	1035.70	1.80	1.10
GMPZA-21	27	1043.69	1046.26	09/10/05	8.56	1037.70	1/12/06	10.39	1035.87	1.83	1.13
GMPZA-22	25	1042.51	1045.24	09/10/05	7.34	1037.90	1/12/06	9.14	1036.10	1.80	1.10
GMPZA-23	32	1049.39	1052.04	09/10/05	14.32	1037.72	1/12/06	16.03	1036.01	1.71	1.36
GMPZA-24	33	1049.02	1051.08	09/10/05	13.95	1037.13	1/12/06	15.22	1035.86	1.27	0.91
GMPZA-25	35	1049.34	1052.19	09/10/05	15.08	1037.11	1/12/06	16.59	1035.60	1.51	1.13
GMPZA-26	30	1049.35	1051.95	09/10/05	14.92	1037.03	1/12/06	16.52	1035.43	1.60	1.18
GMPZA-27	30	1049.53	1052.24	09/10/05	15.17	1037.07	1/12/06	16.83	1035.41	1.66	1.21
GMPZA-28	28	1049.02	1051.91	09/10/05	15.11	1036.80	1/12/06	16.45	1035.46	1.34	0.85
GMPZA-29	28	1049.23	1050.81	09/10/05	14.08	1036.73	1/12/06	15.29	1035.52	1.21	0.69
GMPZA-30	29	1048.74	1051.30	09/10/05	14.58	1036.72	1/12/06	15.81	1035.49	1.23	0.68
GMPZA-31	29	1048.59	1051.17	09/10/05	14.32	1036.85	1/12/06	15.70	1035.47	1.38	0.79
GMPZA-32	36	1048.59	1051.25	09/10/05	14.29	1036.96	1/12/06	15.78	1035.47	1.49	0.87
GMPZA-33	35	1048.06	1050.52	09/10/05	13.48	1037.04	1/12/06	14.97	1035.55	1.49	0.84
GMPZA-34	35	1047.76	1050.41	09/10/05	13.29	1037.12	1/12/06	14.82	1035.59	1.53	0.85
GMPZA-35	40	1046.68	1049.34	09/10/05	12.19	1037.15	1/12/06	13.72	1035.62	1.53	0.83
GMPZA-36	31	1045.56	1048.32	09/10/05	11.11	1037.21	1/12/06	12.65	1035.67	1.54	0.84
GMPZA-37	37	1045.83	1048.34	09/10/05	11.08	1037.26	1/12/06	12.61	1035.73	1.53	0.83
GMPZA-38	38.5	1044.22	1046.56	09/10/05	9.25	1037.31	1/12/06	10.81	1035.75	1.56	0.86
GMPZA-39	36	1042.61	1045.47	09/10/05	8.18	1037.29	1/12/06	9.67	1035.80	1.49	0.79
GMPZA-40	30	1041.42	1043.54	09/10/05	6.23	1037.31	1/12/06	7.71	1035.83	1.48	0.78
GMPZA-41	30	1039.36	1041.84	09/10/05	4.53	1037.31	1/12/06	5.88	1035.96	1.35	0.65
GMPZA-42	25	1042.08	1044.73	09/10/05	6.96	1037.77	1/12/06	8.53	1036.20	1.57	0.87

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Total Well Depth (ft bls)	Ground Elevation (ft msl)	TOC Elevation December 2005 (ft msl)	Date	Depth to Water Sept 2005 (Baseline) (ft TOC)	Water Elevation Sept 2005 (Baseline) (ft msl)	Date	Depth to Water January 2006 (ft TOC)	Water Elevation January 2006 (ft msl)	Drawdown Not Corrected January 2006 (ft)	Drawdown* Corrected January 2006 (ft)
GMPZC-1	125	1045.49	1048.35	09/10/05	5.81	1041.06	1/12/06	10.09	1038.26	2.80	2.80
GMPZC-2	139	1043.68	1046.10	NA	**6.68**	**1039.42**	1/12/06	8.24	1037.86	1.56	1.53
GMPZC-3	130	1046.60	1046.96	09/10/05	11.34	1039.52	1/12/06	12.70	1034.26	5.26	5.21
GMPZC-5	155	1051.09	1053.98	09/10/05	14.54	1039.44	1/12/06	18.55	1035.43	4.01	3.93
GMPZC-6	125	1048.52	1051.25	NA	**12.40**	**1038.85**	1/12/06	15.33	1035.92	2.93	2.74
GMPZC-7	145	1049.47	1052.21	09/10/05	13.34	1038.87	1/12/06	18.43	1033.78	5.09	4.88
GMPZC-8	145	1047.30	1050.09	NA	**12.05**	**1038.04**	1/12/06	14.45	1035.64	2.40	2.15
GMPZC-9	120	1048.73	1051.75	09/10/05	12.70	1039.05	1/12/06	15.26	1036.49	2.56	2.47
GMPZC-10	166	1049.29	1052.28	09/10/05	12.84	1039.44	1/12/06	15.79	1036.49	2.95	2.86
GMPZC-11	125	1046.17	1045.53	09/10/05	5.74	1039.79	1/12/06	7.11	1038.42	1.37	1.39
GMPZC-12	142	1043.03	1046.00	09/10/05	6.51	1039.49	1/12/06	8.19	1037.81	1.68	1.65
GMPZC-13	115	1042.92	1045.21	09/10/05	5.75	1039.46	1/12/06	7.84	1037.37	2.09	2.04
GMPZC-14	116	1047.85	1047.38	09/10/05	8.22	1039.16	1/12/06	10.97	1036.41	2.75	2.65
GMPZC-15	140	1049.40	1048.94	09/10/05	9.81	1039.13	1/12/06	12.86	1036.08	3.05	2.86
GMPZC-16	128	1049.40	1048.83	09/10/05	10.07	1038.76	1/12/06	13.76	1035.07	3.69	3.48
GMPZC-17	135	1047.41	1046.79	09/10/05	8.70	1038.09	1/12/06	10.73	1036.06	2.03	1.78
GMPZC-18	170	1047.46	1050.07	NA	**11.34**	**1039.30**	NA	NA	NA	NA	NA
MP-1S	45	1067.51	1067.27	09/10/05	9.46	1057.81	1/12/06	10.02	1057.25	0.56	0.56
MW-4	90	1125.80	1127.27	09/11/05	69.91	1057.36	1/12/06	70.24	1057.03	0.33	0.33
MW-10	102	1131.41	1133.19	09/11/05	79.45	1053.74	1/12/06	79.60	1053.59	0.15	0.15

Note:
Corrected drawdown not available for system extraction wells.
* Drawdown corrected for regional variation in the water table.
12.39 Bold numbers represent an extrapolated value based on surrounding water level data.
ft Feet.
ft bls Feet below land surface.
ft msl Feet mean sea level.
ft TOC Feet below top of well casing.
NA Not available.
TOC Top of Casing.

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
BR-3	NA	NA	NA	NA	NA	NA	02/13/06	83.64	1044.57	1.16	1.16
GM-1	NA	NA	NA	NA	NA	NA	02/13/06	83.91	1040.06	0.45	0.45
GM-3A	NA	NA	NA	NA	NA	NA	02/13/06	48.61	1070.74	0.59	0.59
GM-3B	NA	NA	NA	NA	NA	NA	02/13/06	75.66	1043.74	0.28	0.28
GM-5	NA	NA	NA	NA	NA	NA	02/13/06	87.06	1038.52	1.35	1.33
GM-6	NA	NA	NA	NA	NA	NA	02/13/06	85.33	1041.38	0.81	0.81
GM-8	NA	NA	NA	NA	NA	NA	02/13/06	11.43	1035.00	0.15	0.15
GM-9	NA	NA	NA	NA	NA	NA	02/13/06	18.07	1037.62	0.23	0.23
GM-10	NA	NA	NA	NA	NA	NA	02/13/06	17.99	1037.87	0.88	0.88
GM-11	NA	NA	NA	NA	NA	NA	02/13/06	13.44	1054.16	-0.10	-0.10
GM-21	NA	NA	NA	NA	NA	NA	02/13/06	6.74	1052.32	-3.19	-3.19
GM-22	NA	NA	NA	NA	NA	NA	02/13/06	8.35	1058.35	-4.24	-4.24
GM-23	NA	NA	NA	NA	NA	NA	02/13/06	8.37	1050.07	-1.95	-1.95
GM-24A	NA	NA	NA	NA	NA	NA	02/13/06	59.20	1039.76	0.18	0.18
GM-24C	NA	NA	NA	NA	NA	NA	02/13/06	59.12	1039.61	0.50	0.50
GM-25A	NA	NA	NA	02/06/06	13.85	1036.23	02/13/06	13.50	1036.58	0.95	0.62
GM-25B	NA	NA	NA	NA	NA	NA	02/13/06	13.78	1036.21	2.63	2.44
GM-25C	NA	NA	NA	NA	NA	NA	02/13/06	12.73	1037.14	2.15	1.97
GM-26A	NA	NA	NA	NA	NA	NA	02/13/06	13.97	1035.59	1.61	0.91
GM-26B	NA	NA	NA	NA	NA	NA	02/13/06	13.50	1036.13	1.47	1.21
GM-26C	NA	NA	NA	NA	NA	NA	02/13/06	13.87	1035.69	2.38	2.12
GM-27A	NA	NA	NA	02/06/06	18.50	1036.46	02/13/06	18.27	1036.69	1.27	0.57
GM-27B	NA	NA	NA	NA	NA	NA	02/13/06	17.87	1037.43	0.97	0.71
GM-27C	NA	NA	NA	NA	NA	NA	02/13/06	16.99	1038.01	0.88	0.62
GM-28A	NA	NA	NA	NA	NA	NA	02/13/06	26.59	1037.96	0.39	0.39
GM-28B	NA	NA	NA	NA	NA	NA	02/13/06	26.67	1037.72	0.41	0.41
GM-29	NA	NA	NA	NA	NA	NA	02/13/06	18.89	1036.91	0.06	0.06
GM-31	NA	NA	NA	NA	NA	NA	02/13/06	84.69	1039.53	0.79	0.69
GM-34A	NA	NA	NA	NA	NA	NA	02/13/06	NA	NA	NA	NA
GM-34B	NA	NA	NA	NA	NA	NA	02/13/06	NA	NA	NA	NA
GM-38A	NA	NA	NA	NA	NA	NA	02/13/06	55.96	1040.90	0.22	0.22

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
GM-38B	NA	NA	NA	NA	NA	NA	02/13/06	54.43	1042.43	0.27	0.27
GM-38C	NA	NA	NA	NA	NA	NA	02/13/06	54.61	1042.35	0.26	0.26
GM-53A	NA	NA	NA	NA	NA	NA	02/13/06	67.68	1039.05	0.51	0.51
GM-53B	NA	NA	NA	NA	NA	NA	02/13/06	67.01	1039.74	0.39	0.39
GM-57	NA	NA	NA	NA	NA	NA	02/13/06	77.86	1052.43	0.48	0.48
GM-58	NA	NA	NA	NA	NA	NA	02/13/06	77.84	1052.76	0.15	0.15
GM-59	NA	NA	NA	NA	NA	NA	02/13/06	81.13	1050.68	0.22	0.22
GM-62A	NA	NA	NA	NA	NA	NA	02/13/06	55.12	1072.57	0.40	0.40
GM-62B	NA	NA	NA	NA	NA	NA	02/13/06	76.45	1051.60	0.65	0.65
GM-62C	NA	NA	NA	NA	NA	NA	02/13/06	76.52	1051.48	0.69	0.69
GM-63A	NA	NA	NA	NA	NA	NA	02/13/06	16.33	1035.94	1.65	0.95
GM-63B	NA	NA	NA	NA	NA	NA	02/13/06	15.08	1037.03	0.24	-0.01
GM-65	NA	NA	NA	NA	NA	NA	02/13/06	30.22	1037.99	1.61	1.42
GM-66A	NA	NA	NA	NA	NA	NA	02/13/06	9.76	1038.40	0.14	0.14
GM-66B	NA	NA	NA	02/06/06	9.66	1038.50	02/13/06	9.43	1038.73	1.05	1.05
GM-76	NA	NA	NA	NA	NA	NA	02/13/06	5.13	1054.83	-4.51	-4.51
GM-77	NA	NA	NA	02/06/06	7.68	1037.58	02/13/06	7.43	1037.83	1.52	1.39
GM-78	NA	NA	NA	NA	NA	NA	02/13/06	14.86	1036.86	0.57	0.24
GM-79	NA	NA	NA	NA	NA	NA	02/13/06	15.11	1037.26	0.79	0.09
GM-84	NA	NA	NA	NA	NA	NA	02/13/06	15.75	1039.39	0.49	0.49
GM-87A	NA	NA	NA	NA	NA	NA	02/13/06	16.63	1037.53	NA	NA
GM-87B	NA	NA	NA	NA	NA	NA	02/13/06	16.64	1037.63	NA	NA
GMEW-1	NA	NA	NA	02/06/06	5.81	1035.88	02/13/06	5.61	1036.08	1.53	NA
GMEW-2	NA	NA	NA	NA	NA	NA	02/13/06	13.30	1037.14	1.30	NA
GMEW-3	NA	NA	NA	NA	NA	NA	02/13/06	28.49	1038.30	1.35	NA
GMEW-4R	NA	NA	NA	NA	NA	NA	02/13/06	82.17	965.15	73.62	NA
GMEW-5	NA	NA	NA	NA	NA	NA	02/13/06	31.14	1037.19	1.13	NA
GMEW-6	NA	NA	NA	NA	NA	NA	02/13/06	24.81	1037.37	0.83	NA
GMEW-8	NA	NA	NA	NA	NA	NA	02/13/06	9.98	1036.49	1.65	NA
GMEWA-1	NA	NA	NA	NA	NA	NA	02/13/06	15.41	1037.25	0.99	NA
GMEWA-2	NA	NA	NA	NA	NA	NA	02/13/06	15.56	1037.06	1.14	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
GMEWA-3	NA	NA	NA	02/06/06	15.32	1036.57	02/13/06	15.06	1036.83	0.35	NA
GMEWA-4	NA	NA	NA	NA	NA	NA	02/13/06	15.06	1032.88	5.25	NA
GMEWA-5	NA	NA	NA	NA	NA	NA	02/13/06	7.72	1033.82	4.08	NA
GMEWA-6	NA	NA	NA	NA	NA	NA	02/13/06	11.67	1030.74	6.96	NA
GMEWA-7	NA	NA	NA	NA	NA	NA	02/13/06	8.90	1032.98	4.49	NA
GMEWA-8	NA	NA	NA	NA	NA	NA	02/13/06	5.91	1034.69	2.71	NA
GMEWA-9	NA	NA	NA	NA	NA	NA	02/13/06	5.04	1034.92	2.43	NA
GMEWA-10	NA	NA	NA	NA	NA	NA	02/13/06	5.85	1035.07	2.26	NA
GMEWA-11	NA	NA	NA	NA	NA	NA	02/13/06	8.38	1034.40	2.92	NA
GMEWA-12	NA	NA	NA	NA	NA	NA	02/13/06	11.04	1032.68	4.58	NA
GMEWA-13	NA	NA	NA	NA	NA	NA	02/13/06	10.22	1034.04	3.21	NA
GMEWA-14	NA	NA	NA	NA	NA	NA	02/13/06	11.25	1034.23	3.00	NA
GMEWA-15	NA	NA	NA	NA	NA	NA	02/13/06	12.25	1033.42	3.82	NA
GMEWA-16	NA	NA	NA	NA	NA	NA	02/13/06	12.10	1034.13	3.09	NA
GMEWA-17	NA	NA	NA	NA	NA	NA	02/13/06	15.45	1031.72	5.42	NA
GMEWA-18	NA	NA	NA	NA	NA	NA	02/13/06	13.45	1033.32	3.77	NA
GMEWA-19	NA	NA	NA	NA	NA	NA	02/13/06	14.41	1032.86	4.16	NA
GMEWA-20	NA	NA	NA	NA	NA	NA	02/13/06	14.61	1033.32	3.71	NA
GMEWA-21	NA	NA	NA	NA	NA	NA	02/13/06	15.01	1033.60	3.50	NA
GMEWA-22	NA	NA	NA	NA	NA	NA	02/13/06	16.98	1031.44	5.62	NA
GMEWA-23	NA	NA	NA	NA	NA	NA	02/13/06	14.84	1033.01	4.18	NA
GMEWA-24	NA	NA	NA	NA	NA	NA	02/13/06	12.58	1034.16	3.19	NA
GMEWA-25	NA	NA	NA	NA	NA	NA	02/13/06	12.79	1034.67	2.69	NA
GMEWA-26	NA	NA	NA	NA	NA	NA	02/13/06	11.46	1036.59	1.06	NA
GMEWA-27	NA	NA	NA	NA	NA	NA	02/13/06	10.51	1036.73	0.88	NA
GMEWA-28	NA	NA	NA	NA	NA	NA	02/13/06	11.14	1036.84	0.71	NA
GMEWA-28A	NA	NA	NA	NA	NA	NA	02/13/06	11.76	1036.89	0.61	NA
GMEWB-1	NA	NA	NA	NA	NA	NA	02/13/06	11.18	1035.99	2.27	NA
GMEWC-1	02/01/06	5.90	1038.38	02/06/06	6.12	1038.16	02/13/06	5.89	1038.39	1.26	NA
GMEWC-1A	02/01/06	8.51	1035.76	NA	NA	NA	02/13/06	8.52	1035.75	3.98	NA
GMEWC-2	NA	NA	NA	02/06/06	5.71	1037.20	02/13/06	5.49	1037.42	2.01	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
GMEWC-2A	NA	NA	NA	NA	NA	NA	02/13/06	10.00	1032.51	6.90	NA
GMEWC-3	NA	NA	NA	NA	NA	NA	02/13/06	12.96	1033.06	6.51	NA
GMEWC-4 (GMEW-9)	NA	NA	NA	NA	NA	NA	02/13/06	24.49	1022.14	17.14	NA
GMEWC-5	NA	NA	NA	NA	NA	NA	02/13/06	49.55	1000.31	38.90	NA
GMEWC-6	NA	NA	NA	NA	NA	NA	02/13/06	101.91	945.70	93.15	NA
GMEWC-7	NA	NA	NA	NA	NA	NA	02/13/06	54.32	993.75	44.94	NA
GMEWC-7A	NA	NA	NA	NA	NA	NA	02/13/06	13.38	1034.26	4.36	NA
GMEWC-8	NA	NA	NA	NA	NA	NA	02/13/06	33.95	1011.75	26.26	NA
GMEWC-8A	NA	NA	NA	NA	NA	NA	02/13/06	10.08	1035.69	2.37	NA
GMEWC-9	NA	NA	NA	NA	NA	NA	02/13/06	11.45	1036.11	2.60	NA
GMEWC-10	NA	NA	NA	NA	NA	NA	02/13/06	90.13	957.98	81.02	NA
GMIM-1	NA	NA	NA	NA	NA	NA	02/13/06	7.92	1036.58	1.61	0.91
GMIM-2	NA	NA	NA	NA	NA	NA	02/13/06	7.63	1036.69	1.57	0.87
GMPZ-1	NA	NA	NA	NA	NA	NA	02/13/06	NA	NA	NA	NA
GMPZ-2	NA	NA	NA	NA	NA	NA	02/13/06	NA	NA	NA	NA
GMPZ-3	NA	NA	NA	NA	NA	NA	02/13/06	NA	NA	NA	NA
GMPZ-5	NA	NA	NA	02/06/06	31.71	1036.83	02/13/06	31.48	1037.06	1.25	0.55
GMPZ-6	NA	NA	NA	NA	NA	NA	02/13/06	26.03	1037.33	0.98	0.65
GMPZ-7	NA	NA	NA	NA	NA	NA	02/13/06	31.20	1037.38	2.28	2.08
GMPZ-8	NA	NA	NA	NA	NA	NA	02/13/06	11.03	1036.47	1.84	1.13
GMPZA-1	NA	NA	NA	02/06/06	15.65	1036.32	02/13/06	15.30	1036.67	1.00	0.66
GMPZA-2	NA	NA	NA	02/06/06	16.14	1035.60	02/13/06	15.81	1035.93	1.44	1.07
GMPZA-3	NA	NA	NA	02/06/06	16.45	1035.32	02/13/06	16.14	1035.63	1.68	1.29
GMPZA-4	NA	NA	NA	NA	NA	NA	02/13/06	16.43	1035.38	1.82	1.40
GMPZA-5	NA	NA	NA	NA	NA	NA	02/13/06	16.59	1035.41	1.99	1.53
GMPZA-6	NA	NA	NA	NA	NA	NA	02/13/06	16.44	1035.69	1.59	1.10
GMPZA-7	NA	NA	NA	02/06/06	16.38	1035.42	02/13/06	16.12	1035.68	1.41	0.89
GMPZA-8	NA	NA	NA	02/06/06	16.33	1035.31	02/13/06	16.08	1035.56	1.72	1.17
GMPZA-9	NA	NA	NA	02/06/06	14.83	1035.11	02/13/06	14.59	1035.35	1.71	1.12
GMPZA-10	NA	NA	NA	NA	NA	NA	02/13/06	15.37	1035.33	1.84	1.21
GMPZA-11	NA	NA	NA	NA	NA	NA	02/13/06	14.67	1035.44	1.76	1.10

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
GMPZA-12	NA	NA	NA	NA	NA	NA	02/13/06	14.29	1035.44	1.75	1.07
GMPZA-13	NA	NA	NA	NA	NA	NA	02/13/06	13.89	1035.54	1.69	0.99
GMPZA-14	NA	NA	NA	NA	NA	NA	02/13/06	12.15	1035.59	1.65	0.94
GMPZA-15	NA	NA	NA	NA	NA	NA	02/13/06	11.56	1035.57	1.71	1.00
GMPZA-16	NA	NA	NA	NA	NA	NA	02/13/06	10.20	1035.57	1.73	1.02
GMPZA-17	NA	NA	NA	NA	NA	NA	02/13/06	9.31	1035.66	1.67	0.97
GMPZA-18	NA	NA	NA	NA	NA	NA	02/13/06	7.49	1035.66	1.67	0.97
GMPZA-19	NA	NA	NA	NA	NA	NA	02/13/06	9.06	1035.55	1.79	1.08
GMPZA-20	NA	NA	NA	02/06/06	9.86	1035.45	02/13/06	9.67	1035.64	1.86	1.16
GMPZA-21	NA	NA	NA	02/06/06	10.75	1035.51	02/13/06	10.55	1035.71	1.99	1.29
GMPZA-22	NA	NA	NA	02/06/06	9.57	1035.67	02/13/06	9.37	1035.87	2.03	1.32
GMPZA-23	NA	NA	NA	02/06/06	16.10	1035.94	02/13/06	15.76	1036.28	1.44	1.09
GMPZA-24	NA	NA	NA	02/06/06	15.33	1035.75	02/13/06	15.02	1036.06	1.07	0.71
GMPZA-25	NA	NA	NA	02/06/06	16.68	1035.51	02/13/06	16.36	1035.83	1.28	0.89
GMPZA-26	NA	NA	NA	NA	NA	NA	02/13/06	16.41	1035.54	1.49	1.07
GMPZA-27	NA	NA	NA	NA	NA	NA	02/13/06	16.73	1035.51	1.56	1.11
GMPZA-28	NA	NA	NA	NA	NA	NA	02/13/06	16.32	1035.59	1.21	0.72
GMPZA-29	NA	NA	NA	02/06/06	15.44	1035.37	02/13/06	15.20	1035.61	1.12	0.62
GMPZA-30	NA	NA	NA	02/06/06	15.96	1035.34	02/13/06	15.73	1035.57	1.15	0.59
GMPZA-31	NA	NA	NA	02/06/06	15.90	1035.27	02/13/06	15.62	1035.55	1.30	0.71
GMPZA-32	NA	NA	NA	NA	NA	NA	02/13/06	15.70	1035.55	1.41	0.79
GMPZA-33	NA	NA	NA	NA	NA	NA	02/13/06	14.88	1035.64	1.40	0.75
GMPZA-34	NA	NA	NA	NA	NA	NA	02/13/06	14.72	1035.69	1.43	0.75
GMPZA-35	NA	NA	NA	NA	NA	NA	02/13/06	13.61	1035.73	1.42	0.71
GMPZA-36	NA	NA	NA	NA	NA	NA	02/13/06	12.56	1035.76	1.45	0.74
GMPZA-37	NA	NA	NA	NA	NA	NA	02/13/06	12.55	1035.79	1.47	0.76
GMPZA-38	NA	NA	NA	NA	NA	NA	02/13/06	10.75	1035.81	1.50	0.80
GMPZA-39	NA	NA	NA	NA	NA	NA	02/13/06	9.61	1035.86	1.43	0.73
GMPZA-40	NA	NA	NA	NA	NA	NA	02/13/06	7.66	1035.88	1.43	0.73
GMPZA-41	NA	NA	NA	NA	NA	NA	02/13/06	5.85	1035.99	1.32	0.62
GMPZA-42	NA	NA	NA	02/06/06	8.88	1035.85	02/13/06	8.67	1036.06	1.71	0.54

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michiga

Well/Boring	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Date	Depth to Water February 2006 (ft TOC)	Water Elevation February 2006 (ft msl)	Drawdown Not Corrected February 2006 (ft)	Drawdown* Corrected February 2006 (ft)
GMPZC-1	02/01/06	10.00	1038.35	02/06/06	10.22	1038.13	02/13/06	10.00	1038.35	2.71	2.71
GMPZC-2	02/01/06	8.18	1037.92	02/06/06	8.42	1037.68	02/13/06	8.19	1037.91	1.51	1.48
GMPZC-3	NA	NA	NA	02/06/06	12.88	1034.08	02/13/06	12.62	1034.34	5.18	5.13
GMPZC-5	NA	NA	NA	NA	NA	NA	02/13/06	18.45	1035.53	3.91	3.83
GMPZC-6	NA	NA	NA	NA	NA	NA	02/13/06	15.21	1036.04	2.81	2.62
GMPZC-7	NA	NA	NA	NA	NA	NA	02/13/06	18.36	1033.85	5.02	4.81
GMPZC-8	NA	NA	NA	NA	NA	NA	02/13/06	14.51	1035.58	2.46	2.21
GMPZC-9	NA	NA	NA	NA	NA	NA	02/13/06	15.21	1036.54	2.51	2.42
GMPZC-10	NA	NA	NA	NA	NA	NA	02/13/06	15.68	1036.60	2.84	2.76
GMPZC-11	02/01/06	7.04	1038.49	02/06/06	7.26	1038.27	02/13/06	7.00	1038.53	1.26	1.28
GMPZC-12	NA	NA	NA	02/06/06	8.31	1037.69	02/13/06	8.10	1037.90	1.59	1.56
GMPZC-13	NA	NA	NA	02/06/06	8.04	1037.17	02/13/06	7.77	1037.44	2.02	1.97
GMPZC-14	NA	NA	NA	NA	NA	NA	02/13/06	10.87	1036.51	2.65	2.56
GMPZC-15	NA	NA	NA	NA	NA	NA	02/13/06	12.72	1036.22	2.91	2.72
GMPZC-16	NA	NA	NA	NA	NA	NA	02/13/06	13.66	1035.17	3.59	3.38
GMPZC-17	NA	NA	NA	NA	NA	NA	02/13/06	10.80	1035.99	2.10	1.85
GMPZC-18	NA	NA	NA	NA	NA	NA	02/13/06	13.29	1036.78	2.52	1.48
MP-1S	NA	NA	NA	NA	NA	NA	02/13/06	10.10	1057.17	0.64	0.64
MW-4	NA	NA	NA	NA	NA	NA	02/13/06	70.36	1056.91	0.45	0.45
MW-10	NA	NA	NA	NA	NA	NA	02/13/06	79.65	1053.54	0.20	0.20

Note:
Corrected drawdown not available for system extraction wells.
*
Drawdown corrected for regional variation in the water table.
12.39
Bold numbers represent an extrapolated value based on surrounding water level data.
ft
Feet.
ft bls
Feet below land surface.
ft msl
Feet mean sea level.
ft TOC
Feet below top of well casing.
NA
Not available.
TOC
Top of Casing.

Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
BR-3	NA	NA	NA	08/08/06	84.07	1044.14	1.59	1.59
GM-1	NA	NA	NA	08/08/06	84.34	1039.63	0.88	0.88
GM-3A	NA	NA	NA	08/08/06	48.48	1070.87	0.46	0.46
GM-3B	NA	NA	NA	08/08/06	76.15	1043.25	0.77	0.77
GM-5	NA	NA	NA	08/08/06	87.51	1038.07	1.80	1.78
GM-6	NA	NA	NA	08/08/06	85.87	1040.84	1.35	1.35
GM-8	NA	NA	NA	08/08/06	11.48	1034.95	0.20	0.20
GM-9	NA	NA	NA	08/08/06	18.49	1037.20	0.65	0.65
GM-10	NA	NA	NA	08/08/06	18.34	1037.52	1.23	1.23
GM-11	NA	NA	NA	08/08/06	13.52	1054.08	-0.02	-0.02
GM-21	NA	NA	NA	08/08/06	8.24	1050.82	-1.69	-1.69
GM-22	NA	NA	NA	08/08/06	10.06	1056.64	-2.53	-2.53
GM-23	NA	NA	NA	08/08/06	9.17	1049.27	-1.15	-1.15
GM-24A	NA	NA	NA	08/08/06	59.58	1039.38	0.56	0.56
GM-24C	NA	NA	NA	08/08/06	59.23	1039.50	0.61	0.61
GM-25A	03/15/06	13.68	1036.40	08/08/06	14.27	1035.81	1.72	1.39
GM-25B	NA	NA	NA	08/08/06	14.81	1035.18	3.66	3.47
GM-25C	NA	NA	NA	08/08/06	13.54	1036.35	2.94	2.76
GM-26A	NA	NA	NA	08/08/06	14.47	1035.09	2.12	1.14
GM-26B	NA	NA	NA	08/08/06	14.03	1035.60	2.00	1.74
GM-26C	NA	NA	NA	08/08/06	14.15	1035.41	2.66	2.40
GM-27A	NA	NA	NA	08/08/06	18.71	1036.25	1.71	1.01
GM-27B	NA	NA	NA	08/08/06	18.3	1037.00	1.40	1.14
GM-27C	NA	NA	NA	08/08/06	17.38	1037.62	1.27	1.01
GM-28A	NA	NA	NA	08/08/06	27.23	1037.32	1.03	1.03
GM-28B	NA	NA	NA	08/08/06	27.08	1037.31	0.82	0.82
GM-29	NA	NA	NA	08/08/06	19.32	1036.48	0.49	0.49
GM-31	NA	NA	NA	08/08/06	85.46	1038.76	1.56	1.46
GM-34A	NA	NA	NA	08/08/06	18.57	1069.61	0.53	0.53
GM-34B	NA	NA	NA	08/08/06	46.47	1041.69	0.53	0.53
GM-38A	NA	NA	NA	08/08/06	56.3	1040.56	0.56	0.56

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
GM-38B	NA	NA	NA	08/08/06	54.84	1042.02	0.68	0.68
GM-38C	NA	NA	NA	08/08/06	55.02	1041.94	0.67	0.67
GM-53A	NA	NA	NA	08/08/06	68.24	1038.49	1.07	1.07
GM-53B	NA	NA	NA	08/08/06	67.42	1039.33	0.80	0.80
GM-57	NA	NA	NA	08/08/06	77.84	1052.45	0.46	0.46
GM-58	NA	NA	NA	08/08/06	78.03	1052.57	0.34	0.34
GM-59	NA	NA	NA	08/08/06	81.83	1049.98	0.92	0.92
GM-62A	NA	NA	NA	08/08/06	55.18	1072.51	0.46	0.46
GM-62B	NA	NA	NA	08/08/06	77.21	1050.84	1.41	1.41
GM-62C	NA	NA	NA	08/08/06	77.4	1050.60	1.57	1.57
GM-63A	NA	NA	NA	08/08/06	16.69	1035.58	2.01	1.31
GM-63B	NA	NA	NA	08/08/06	15.54	1036.57	0.70	0.45
GM-65	NA	NA	NA	08/08/06	31.4	1036.81	2.79	2.60
GM-66A	NA	NA	NA	08/08/06	10.29	1037.87	0.67	0.67
GM-66B	NA	NA	NA	08/08/06	9.82	1038.34	1.44	1.44
GM-76	NA	NA	NA	08/08/06	7.33	1052.63	-2.31	-2.31
GM-77	03/16/06	7.48	1037.78	08/08/06	7.91	1037.35	2.00	1.87
GM-78	NA	NA	NA	08/08/06	15.58	1036.14	1.29	0.96
GM-79	NA	NA	NA	08/08/06	15.6	1036.77	1.28	0.58
GM-84	NA	NA	NA	08/08/06	16.19	1038.95	0.93	0.93
GM-87A	NA	NA	NA	08/08/06	17.12	1037.04	NA	NA
GM-87B	NA	NA	NA	08/08/06	17.12	1037.15	NA	NA
GMEW-1	NA	NA	NA	08/08/06	6.03	1035.66	1.95	1.25
GMEW-2	NA	NA	NA	08/08/06	13.82	1036.62	1.82	1.12
GMEW-3	NA	NA	NA	08/08/06	29.35	1037.44	2.21	2.02
GMEW-4R	NA	NA	NA	08/08/06	12.26	1035.06	3.71	3.52
GMEW-5	NA	NA	NA	08/08/06	31.71	1036.62	1.70	1.00
GMEW-6	NA	NA	NA	08/08/06	25.54	1036.64	1.56	1.23
GMEW-8	NA	NA	NA	08/08/06	10.43	1036.04	2.11	1.84
GMEWA-1	NA	NA	NA	08/08/06	15.86	1036.80	1.44	NA
GMEWA-2	NA	NA	NA	08/08/06	16.01	1036.61	1.59	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
GMEWA-3	NA	NA	NA	08/08/06	15.51	1036.38	0.80	NA
GMEWA-4	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-5	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-6	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-7	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-8	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-9	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-10	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-11	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-12	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-13	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-14	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-15	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-16	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-17	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-18	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-19	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-20	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-21	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-22	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-23	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-24	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-25	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWA-26	NA	NA	NA	08/08/06	12.24	1035.81	1.84	NA
GMEWA-27	NA	NA	NA	08/08/06	11.24	1036.00	1.61	NA
GMEWA-28	NA	NA	NA	08/08/06	11.87	1036.11	1.44	NA
GMEWA-28A	NA	NA	NA	08/08/06	12.47	1036.18	1.32	NA
GMEWB-1	NA	NA	NA	08/08/06	11.92	1035.25	3.02	NA
GMEWC-1	03/16/06	6.00	1038.28	08/08/06	6.07	1038.21	1.44	NA
GMEWC-1A	NA	NA	NA	08/08/06	6.07	1038.20	1.53	NA
GMEWC-2	03/16/06	5.80	1037.11	08/08/06	5.86	1037.05	2.38	NA

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
GMEWC-2A	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-3	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-4 (GMEW-9)	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-5	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-6	NA	NA	NA	08/08/06	12.85	1034.76	4.09	NA
GMEWC-7	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-7A	NA	NA	NA	08/08/06	14.23	1033.41	5.21	NA
GMEWC-8	NA	NA	NA	08/08/06	NA	NA	NA	NA
GMEWC-8A	NA	NA	NA	08/08/06	10.38	1035.39	2.67	NA
GMEWC-9	NA	NA	NA	08/08/06	12.25	1035.31	3.40	NA
GMEWC-10	NA	NA	NA	08/08/06	13.09	1035.03	3.97	NA
GMIM-1	NA	NA	NA	08/08/06	8.06	1036.44	1.75	1.05
GMIM-2	NA	NA	NA	08/08/06	8.34	1035.98	2.28	1.58
GMPZ-1	NA	NA	NA	08/08/06	16.12	1036.55	1.92	1.22
GMPZ-2	NA	NA	NA	08/08/06	16.43	1036.71	1.79	1.09
GMPZ-3	NA	NA	NA	08/08/06	7.91	1036.17	2.06	1.35
GMPZ-5	NA	NA	NA	08/08/06	31.91	1036.63	1.68	0.98
GMPZ-6	NA	NA	NA	08/08/06	26.73	1036.63	1.68	1.35
GMPZ-7	NA	NA	NA	08/08/06	32.17	1036.41	3.25	3.05
GMPZ-8	NA	NA	NA	08/08/06	11.5	1036.00	2.31	1.60
GMPZA-1	03/15/06	15.47	1036.50	08/08/06	16.1	1035.87	1.80	1.46
GMPZA-2	03/15/06	16.08	1035.66	08/08/06	16.73	1035.01	2.36	1.99
GMPZA-3	NA	NA	NA	08/08/06	16.52	1034.75	2.56	2.17
GMPZA-4	NA	NA	NA	08/08/06	17.23	1034.58	2.62	2.20
GMPZA-5	NA	NA	NA	08/08/06	17.54	1034.46	2.94	2.58
GMPZA-6	NA	NA	NA	08/08/06	17.63	1034.50	2.78	2.29
GMPZA-7	NA	NA	NA	08/08/06	17.28	1034.52	2.57	2.05
GMPZA-8	NA	NA	NA	08/08/06	16.94	1034.70	2.58	2.03
GMPZA-9	NA	NA	NA	08/08/06	15.18	1034.76	2.30	1.71
GMPZA-10	NA	NA	NA	08/08/06	15.95	1034.75	2.42	1.79
GMPZA-11	NA	NA	NA	08/08/06	15.23	1034.88	2.32	1.66

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
GMPZA-12	NA	NA	NA	08/08/06	14.79	1034.94	2.25	1.57
GMPZA-13	NA	NA	NA	08/08/06	14.43	1035.00	2.23	1.53
GMPZA-14	NA	NA	NA	08/08/06	12.76	1034.98	2.27	1.55
GMPZA-15	NA	NA	NA	08/08/06	12.04	1035.09	2.19	1.48
GMPZA-16	NA	NA	NA	08/08/06	10.63	1035.14	2.16	1.45
GMPZA-17	NA	NA	NA	08/08/06	9.73	1035.24	2.09	1.39
GMPZA-18	NA	NA	NA	08/08/06	7.86	1035.29	2.04	1.34
GMPZA-19	NA	NA	NA	08/08/06	9.4	1035.21	2.13	1.42
GMPZA-20	NA	NA	NA	08/08/06	10.04	1035.27	2.23	1.53
GMPZA-21	NA	NA	NA	08/08/06	10.91	1035.35	2.35	1.65
GMPZA-22	NA	NA	NA	08/08/06	9.71	1035.53	2.37	1.66
GMPZA-23	03/15/06	15.97	1036.07	08/08/06	16.58	1035.46	2.26	1.91
GMPZA-24	03/15/06	15.21	1035.87	08/08/06	15.83	1035.25	1.88	1.52
GMPZA-25	03/15/06	16.56	1035.63	08/08/06	17.22	1034.97	2.14	1.75
GMPZA-26	NA	NA	NA	08/08/06	17.22	1034.73	2.30	1.88
GMPZA-27	NA	NA	NA	08/08/06	17.63	1034.61	2.46	2.01
GMPZA-28	NA	NA	NA	08/08/06	17.35	1034.56	2.24	1.75
GMPZA-29	NA	NA	NA	08/08/06	16.2	1034.61	2.12	1.60
GMPZA-30	NA	NA	NA	08/08/06	16.52	1034.78	1.94	1.38
GMPZA-31	NA	NA	NA	08/08/06	16.29	1034.88	1.97	1.38
GMPZA-32	NA	NA	NA	08/08/06	16.27	1034.98	1.98	1.36
GMPZA-33	NA	NA	NA	08/08/06	15.41	1035.11	1.93	1.28
GMPZA-34	NA	NA	NA	08/08/06	15.26	1035.15	1.98	1.29
GMPZA-35	NA	NA	NA	08/08/06	14.15	1035.19	1.96	1.25
GMPZA-36	NA	NA	NA	08/08/06	13.12	1035.20	2.01	1.30
GMPZA-37	NA	NA	NA	08/08/06	13.04	1035.30	1.96	1.25
GMPZA-38	NA	NA	NA	08/08/06	11.19	1035.37	1.94	1.24
GMPZA-39	NA	NA	NA	08/08/06	10.04	1035.43	1.86	1.16
GMPZA-40	NA	NA	NA	08/08/06	8.08	1035.46	1.85	1.15
GMPZA-41	NA	NA	NA	08/08/06	6.26	1035.58	1.73	1.02
GMPZA-42	NA	NA	NA	08/08/06	9.07	1035.66	2.11	1.40

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Table 7-1. Groundwater Extraction System Water Level/Elevation/Drawdown Data, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Date	Depth to Water March 2006 (ft TOC)	Water Elevation March 2006 (ft msl)	Date	Depth to Water August 2006 (ft TOC)	Water Elevation August 2006 (ft msl)	Drawdown Not Corrected August 2006 (ft)	Drawdown* Corrected August 2006 (ft)
GMPZC-1	03/16/06	10.10	1038.25	08/08/06	10.12	1038.23	2.83	2.83
GMPZC-2	03/16/06	8.25	1037.85	08/08/06	8.61	1037.49	1.93	1.90
GMPZC-3	03/16/06	12.61	1034.35	08/08/06	13.22	1033.74	5.78	5.73
GMPZC-5	NA	NA	NA	08/08/06	19.51	1034.47	4.97	4.89
GMPZC-6	NA	NA	NA	08/08/06	15.88	1035.37	3.48	3.29
GMPZC-7	NA	NA	NA	08/08/06	19.34	1032.87	6.00	5.79
GMPZC-8	NA	NA	NA	08/08/06	14.94	1035.15	2.89	2.64
GMPZC-9	NA	NA	NA	08/08/06	16.1	1035.65	3.40	3.31
GMPZC-10	NA	NA	NA	08/08/06	17.01	1035.27	4.17	4.09
GMPZC-11	03/16/06	7.15	1038.38	08/08/06	7.33	1038.20	1.62	1.61
GMPZC-12	03/16/06	8.15	1037.85	08/08/06	8.61	1037.39	2.10	2.07
GMPZC-13	03/16/06	7.75	1037.46	08/08/06	8.39	1036.82	2.64	2.59
GMPZC-14	NA	NA	NA	08/08/06	11.86	1035.52	3.64	3.55
GMPZC-15	NA	NA	NA	08/08/06	13.79	1035.15	3.98	3.79
GMPZC-16	NA	NA	NA	08/08/06	14.85	1033.98	4.78	4.57
GMPZC-17	NA	NA	NA	08/08/06	11.3	1035.49	2.60	2.35
GMPZC-18	NA	NA	NA	08/08/06	14.06	1036.01	3.29	3.22
MP-1S	NA	NA	NA	08/08/06	9.5	1057.77	0.04	0.04
MW-4	NA	NA	NA	08/08/06	70.09	1057.18	0.18	0.18
MW-10	NA	NA	NA	08/08/06	80.78	1052.41	1.33	1.33

Note:	Corrected drawdown not available for system extraction wells.
*	Drawdown corrected for regional variation in the water table.
12.39	Bold numbers represent an extrapolated value based on surrounding water level data.
ft	Feet.
ft bls	Feet below land surface.
ft msl	Feet mean sea level.
ft TOC	Feet below top of well casing.
NA	Not available.
TOC	Top of Casing.

Table 7-2. Zone A Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 15 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
Northern End	GM-66A	Inland	1038.54	1038.24	1038.4	NA	1037.87	0.30	0.14	0.67
	GM-31	Farther inland	1040.32	1039.48	1039.53	NA	1038.76	0.74	0.69	1.46
	GM-78	River	1037.43	1036.63	1036.86	NA	1036.14	0.47	0.24	0.96
	GMEWA-28A	Inland	1037.50	1036.66	1036.89	NA	1036.18	NA	NA	NA
	GMEWA-28	Inland	1037.55	1036.61	1036.84	NA	1036.11	NA	NA	NA
	GMPZ-6	Farther inland	1038.31	1037.23	1035.69	NA	1036.63	0.75	0.65	1.35
	GMEWA-27	Inland	1037.61	1037.48	1036.73	NA	1036	NA	NA	NA
	GMPZA-1	Inland	1037.67	1036.26	1036.67	1036.50	1035.87	1.07	0.66	1.46
GMEWA-26	GMPZA-2	Inland	1037.37	1035.76	1035.93	1035.66	1035.01	1.24	1.07	1.99
	GMPZA-23	River	1037.72	1036.01	1036.28	1036.07	1035.46	1.36	1.09	1.91
			-0.35	**-0.25**	**-0.35**	**-0.41**	**-0.45**			
GMEWA-25	GMPZA-2	Inland	1037.37	1035.76	1035.93	1035.66	1035.01	1.24	1.07	1.99
	GMPZA-24	River	1037.13	1035.86	1036.06	1035.87	1035.25	0.91	0.71	1.52
			0.24	**-0.10**	**-0.13**	**-0.21**	**-0.24**			
GMEWA-24	GMPZA-3	Inland	1037.31	1035.59	1035.63	NA	1034.75	1.33	1.29	2.17
	GMPZA-25	River	1037.11	1035.60	1035.83	1035.63	1034.97	1.13	0.89	1.75
			0.20	**-0.01**	**-0.20**	NA	**-0.22**			
GMEWA-23	GMPZA-4	Inland	1037.20	1035.29	1035.38	NA	1034.58	1.49	0.90	2.2
	GMPZA-26	River	1037.03	1035.43	1035.54	NA	1034.73	1.18	1.07	1.88
			0.17	**-0.14**	**-0.16**	NA	**-0.15**			
GMEWA-22	GMPZA-5	Inland	1037.40	1035.33	1035.41	NA	1034.46	1.16	1.53	2.58
	GMPZA-27	River	1037.07	1035.41	1035.51	NA	1034.61	1.12	1.11	2.01
			0.33	**-0.08**	**-0.10**	NA	**-0.15**			

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Table 7-2. Zone A Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 15 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
GMEWA-21	GMPZA-6	Inland	1037.28	1035.63	1035.69	NA	1034.50	1.16	1.10	2.29
	GMPZA-28	River	1036.80	1035.46	1035.59	NA	1034.56	0.85	0.72	1.75
			0.48	**0.17**	**0.10**	NA	**-0.06**			
GMEWA-20	GMPZA-7	Inland	1037.09	1035.63	1035.68	NA	1034.52	0.94	0.89	2.05
	GMPZA-29	River	1036.73	1035.52	1035.61	NA	1034.61	0.69	0.60	1.6
			0.36	**0.11**	**0.07**	NA	**-0.09**			
GMEWA-19	GMPZA-8	Inland	1037.28	1035.53	1035.56	NA	1034.70	1.19	1.17	2.03
	GMPZA-30	River	1036.72	1035.49	1035.57	NA	1034.78	0.68	0.59	1.38
			0.56	**0.04**	**-0.01**	NA	**-0.08**			
GMEWA-18	GMPZA-9	Inland	1037.06	1035.43	1035.35	NA	1034.76	1.04	1.12	1.71
	GMPZA-31	River	1036.85	1035.47	1035.55	NA	1034.88	0.79	0.71	1.38
			0.21	**-0.04**	**-0.20**	NA	**-0.12**			
GMEWA-17	GMPZA-10	Inland	1037.17	1035.30	1035.33	NA	1034.75	1.25	1.21	1.79
	GMPZA-32	River	1036.96	1035.47	1035.55	NA	1034.98	0.87	0.79	1.36
			0.21	**-0.17**	**-0.22**	NA	**-0.23**			
GMEWA-16	GMPZA-11	Inland	1037.20	1035.42	1035.44	NA	1034.88	1.13	1.10	1.66
	GMPZA-33	River	1037.04	1035.55	1035.64	NA	1035.11	0.84	0.75	1.28
			0.16	**-0.13**	**-0.20**	NA	**-0.23**			
GMEWA-15	GMPZA-12	Inland	1037.19	1035.39	1035.44	NA	1034.94	1.12	1.07	1.57
	GMPZA-34	River	1037.12	1035.59	1035.69	NA	1035.15	0.85	0.75	1.29
			0.07	**-0.20**	**-0.25**	NA	**-0.21**			
GMEWA-14	GMPZA-13	Inland	1037.23	1035.46	1035.54	NA	1035.00	1.07	0.99	1.53
	GMPZA-35	River	1037.15	1035.62	1035.73	NA	1035.19	0.83	0.71	1.25
			0.08	**-0.16**	**-0.19**	NA	**-0.19**			

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Table 7-2. Zone A Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 15 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
GMEWA-13	GMPZA-14	Inland	1037.24	1035.56	1035.59	NA	1034.98	0.98	0.94	1.55
	GMPZA-36	River	1037.21	1035.67	1035.76	NA	1035.20	0.84	0.74	1.3
			0.03	**-0.11**	**-0.17**	NA	**-0.22**			
GMEWA-12	GMPZA-15	Inland	1037.28	1035.53	1035.57	NA	1035.09	1.05	1.00	1.48
	GMPZA-37	River	1037.26	1035.73	1035.79	NA	1035.30	0.83	0.76	1.25
			0.02	**-0.20**	**-0.22**	NA	**-0.21**			
GMEWA-11	GMPZA-16	Inland	1037.30	1035.55	1035.57	NA	1035.14	1.05	1.02	1.45
	GMPZA-38	River	1037.31	1035.75	1035.81	NA	1035.37	0.86	0.80	1.24
			-0.01	**-0.20**	**-0.24**	NA	**-0.23**			
GMEWA-10	GMPZA-17	Inland	1037.33	1035.61	1035.66	NA	1035.24	1.02	0.97	1.39
	GMPZA-39	River	1037.29	1035.80	1035.86	NA	1035.43	0.79	0.73	1.16
			0.04	**-0.19**	**-0.20**	NA	**-0.19**			
		Inland								
GMEWA-9	GMPZA-18	River	1037.33	1035.61	1035.66	NA	1035.29	1.02	0.97	1.34
	GMPZA-40		1037.31	1035.83	1035.88	NA	1035.46	0.78	0.62	1.15
			0.02	**-0.22**	**-0.22**	NA	**-0.17**			
GMEWA-8	GMPZA-19	Inland	1037.34	1035.53	1035.55	NA	1035.21	1.11	1.08	1.42
	GMPZA-41	River	1037.31	1035.96	1035.99	NA	1035.58	0.65	0.54	1.02
			0.03	**-0.43**	**-0.44**	NA	**-0.37**			
GMEWA-7	GMPZA-20	Inland	1037.50	1035.70	1035.64	NA	1035.27	1.10	1.16	1.53
	GMEW-1	River	1037.61	1036.09	1036.08	NA	1035.66	0.82	0.83	1.25
			-0.11	**-0.39**	**-0.44**	NA	**-0.39**			
GMEWA-6	GMPZA-21	Inland	1037.70	1035.87	1035.71	NA	1035.35	1.13	1.29	1.65
	GMPZA-42	River	1037.77	1036.20	1036.06	NA	1035.66	0.87	1.00	1.4
			-0.07	**-0.33**	**-0.35**	NA	**-0.31**			

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Table 7-2. Zone A Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 15 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
GMEWA-5	GMPZA-22	Inland	1037.95	1036.10	1035.87	NA	1035.53	1.10	1.32	1.66
	GMEWA-4	Inland	1038.13	1036.78	pumping	pumping	pumping	NA	NA	NA
	GMEWA-3	Inland	1037.18	1037.05	1036.83	NA	1036.38	NA	NA	NA
Southern End	GM-27A	Inland	1037.96	1036.84	1036.69	NA	1036.25	0.42	0.57	1.01
	GMEWA-2	Inland	1038.2	1037.20	1037.06	NA	1036.61	NA	NA	NA
	GMEWA-1	Inland	1038.24	1037.34	1037.25	NA	1036.80	NA	NA	NA
	GM-79	River	1038.05	1037.23	1037.26	NA	1036.77	0.12	0.09	0.58
	GM-87A	Inland	NA	NA	1037.53	NA	1037.04	NA	NA	NA

ft Feet.
ft msl Feet mean sea level.
NA Not available.
(-0.35) Denotes a negative gradient or inland gradient away from the Menomonee River.
* Drawdown corrected for regional variations in the water table.
Note: Corrected drawdown not available for system extraction wells.

Table 7-3. Zone B/C Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 16 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
Northern End	GM-84	River	1039.88	1039.26	1039.39	NA	1038.95	0.62	0.49	0.93
	GM-6	Farther Inland	1042.19	1041.35	1041.38	NA	1040.84	0.84	0.81	1.35
	GM-66B	River	1039.78	1038.64	1038.73	NA	1038.34	1.14	1.05	0.67
	GM-5	Farther Inland	1039.87	1038.47	1038.52	NA	1038.07	1.38	1.33	1.78
GMEWC-1A	GMPZC-1	Farther inland	1041.06	1038.26	1038.35	1038.25	1038.23	2.80	2.71	2.83
	GMEWC-1	Inland	1039.65	1038.68	1038.39	1038.28	1038.21	NA	NA	NA
	GMPZC-11	River	1039.79	1038.42	1038.53	1038.38	1038.2	1.39	1.28	1.61
			-0.14	**-0.16**	**-0.18**	**-0.13**	**0.03**			
GMEWC-2A	GMPZC-2	Inland	1039.42	1037.86	1037.91	1037.85	1037.49	1.53	1.48	1.9
	GMEWC-2	Inland	1039.43	1037.33	1037.42	1037.11	1037.05	NA	NA	NA
	GMPZC-12	River	1039.49	1037.81	1037.9	1037.85	1037.39	1.65	1.56	2.07
			-0.07	**-0.48**	**-0.48**	**-0.74**	**-0.34**			
GMEWC-3	GMPZC-3	Inland	1039.52	1034.26	1034.34	1034.35	1033.74	5.21	5.13	5.73
	GMPZC-13	River	1039.46	1037.37	1037.44	1037.46	1036.82	2.04	1.97	2.59
			0.06	**-3.11**	**-3.1**	**-3.11**	**-3.08**			
GMEWC-4	GMPZC-18	Inland	**1039.3**	NA	1036.78	NA	1036.01	NA	NA	NA
GMEWC-5	GMPZC-5	Inland	1039.44	1035.43	1035.53	NA	1035.47	3.93	3.83	4.89
GMEWC-11	GMPZC-10	Inland	1039.44	NA	NA	NA	1035.27	NA	NA	4.09
	GMPZC-14	River	1039.16	NA	NA	NA	1035.52	NA	NA	3.55
			0.28	NA	NA	NA	**-0.25**			
GMEWC-10	GMPZC-10	Inland	1039.44	1036.49	1036.6	NA	NA	2.86	2.76	NA
	GMPZC-14	River	1039.16	1036.41	1036.51	NA	NA	2.66	2.56	NA
			0.28	**0.08**	**0.09**	NA	NA			

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Table 7-3. Zone B/C Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 16 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
GMEWC-9	GMPZC-9	Inland	1039.05	1036.49	1036.54	NA	NA	2.47	1.12	NA
	GMPZC-14	River	1039.16	1036.41	1036.51	NA	NA	2.66	2.56	NA
			-0.11	**0.08**	**0.03**	NA	NA			
GMEWC-12	GMEWC-9	Inland	1038.71	NA	NA	NA	1035.31	NA	NA	NA
	GMPZC-14	River	1039.16	NA	NA	NA	1035.52	NA	NA	3.55
			-0.45	NA	NA	NA	**-0.21**			
GMEWC-6	GMPZC-6	Inland	1038.85	1035.92	1036.04	NA	NA	2.74	2.62	NA
	GMPZC-15	River	1039.13	1036.08	1036.22	NA	NA	2.86	2.72	NA
			-0.28	**-0.16**	**-0.18**	NA	NA			
GMEWC-13	GMEWC-6	Inland	1038.85	NA	NA	NA	1034.76	NA	NA	NA
	GMPZC-15	River	1039.13	NA	NA	NA	1035.15	NA	NA	3.79
			-0.28	NA	NA	NA	**-0.39**			
GMEWB-1	GMEWB-1	Inland	1038.26	1035.98	1035.99	NA	1035.25	NA	NA	NA
GMEWC-7	GMEWC-7A	Inland	1038.62	1034.27	1034.26	NA	1033.41	NA	NA	NA
	GMPZC-7	Inland	1038.87	1033.78	1033.85	NA	1032.87	4.88	4.81	5.79
	GMPZC-16	River	1038.76	1035.07	1035.17	NA	1033.98	3.48	3.38	4.57
			-0.14	**-0.80**	**-1.32**	NA	**-1.11**			
GMEWC-8	GMPZ-8	Farther Inland	1038.31	1036.57	1036.47	NA	1036	1.03	1.13	1.6
	GMPZC-8	Inland	1038.04	1035.64	1035.58	NA	1035.15	2.15	2.21	2.64
	GMPZC-17	River	1038.09	1036.06	1035.99	NA	1035.49	1.78	1.85	2.35
			-0.05	**-0.42**	**-0.41**	NA	**-0.34**			

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Table 7-3. Zone B/C Sands - Difference in Groundwater Levels Between Baseline (September 2006) and Dynamic Groundwater Extraction System Conditions, Ford-Kingsford Products Facility, Kingsford, Michigan.

Extraction Well	Monitoring Point	Location	BASELINE September 11 2006 (ft msl)	January 12 2006 (ft msl)	February 13 2006 (ft msl)	March 16 2006 (ft msl)	August 8 2006 (ft msl)	Drawdown* January 2006 (corrected) (ft)	Drawdown* February 2006 (corrected) (ft)	Drawdown* August 2006 (corrected) (ft)
Southern End	GM-27B	Inland	1038.40	1037.49	1037.43	NA	1037.00	0.65	0.71	1.14
	GM-87B	Inland	NA	NA	1037.63	NA	1037.15	NA	NA	NA
	GM-28B	Farther Inland	1038.13	1037.63	1037.72	NA	1037.31	0.50	0.41	0.82
	GM-9	River	1037.85	1037.43	1037.62	NA	1037.20	0.42	0.23	0.65

Extraction Wells GMEWC-6, GMEWC-9, and GMEWC-10 discontinued operation on August 1, 2006 and were replaced by GMEWC-11, GMEWC-12, and, GMEWC-13. Extraction Wells GMEWC-6 and GMEWC-9 were converted to Piezometers GMEWC-6 and GMEWC-9.

1039.30 Bold numbers represent an extrapolated value based on surrounding water level data.

ft Feet.

ft msl Feet mean sea level.

NA Not available.

(-0.14) Denotes a negative gradient or inland gradient away from the Menomonee River.

* Drawdown corrected for regional variations in the water table.

Note: Corrected drawdown not available for system extraction wells.

Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-12			GM-13			GM-14			GM-15		
Top of Screen Depth (ft bls)	290	290	290	325	325	325	135	135	135	165	165	165
Sample Date	10/22/97	10/10/98	04/19/99	10/22/97	04/20/99	05/18/04	10/21/97	10/28/98	05/02/99	10/20/97	10/11/98	04/20/99
Sample ID	GM-12	GWGM-12	GWGM-12	GM-13	GWGM-13	GWGM-13 (5/18/04)	GM-14	GWGM-14	GWGM-14	GM-15	GWGM-15	GWGM-15
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	NA	<1	<1 J	NA	<1	<1.0	NA	<1	<1	NA	<1	<1
1,2-Dichloroethene (total)	NA	<1	<1	NA	<1	<2.0	NA	<1	<1	NA	<1	<1
1,3,5-Trimethylbenzene	NA	<1	<1 J	NA	<1 J	<1.0	NA	<1	<1	NA	<1	<1
1,3-Dichlorobenzene	<1	<5	<5	<1	<5	<1.0	<1	<5	<5	<1	<5	<5
2-Butanone (MEK)	<10	<10	<10 J	<10	<10	4.1 J	<10	<10	<10	<10	<10	<10
2-Hexanone	<10	<10	<10	<10	<10	<50	<10	<10	<10 J	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<10 J	<10	<10	<50	<10	<10	<10 J	<10	<10	<10
Acetone	<10	<10	R	<10	R	9.2 J	<10	<10	R	<10	<10	R
Acrylonitrile	NA	<25	<25 J	NA	R	<25	NA	<25	R	NA	<25	<25
Benzene	0.33 J	<1	<1	5.3	8.8	2.6	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Carbon disulfide	0.40 J	<1	<1	0.53 J	8.5	1.7 J	<1	<1	<1	1.9	<1	6
Chlorobenzene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Diethylether	NA	<10	<10	NA	18	5.9 J	NA	<10	<10	NA	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Furan	NA	<5	<5	NA	<5	0.17 J	NA	<5	<5	NA	<5	<5
Isopropylbenzene	NA	<1	<1	NA	<1	<1.0	NA	<1	<1	NA	<1	<1
Methyl iodide	NA	<5	<5	NA	<5	<5.0	NA	<5	<5	NA	<5	<5
Methyl(tert)butyl ether	NA	<50	<50	NA	<50	<5.0	NA	<50	<50	NA	<50	<50
Methylene chloride	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
n-Propylbenzene	NA	<1	<1 J	NA	<1 J	<1.0	NA	<1	<1	NA	<1	<1
Propionitrile	NA	NA	NA	NA	NA	<25	NA	NA	NA	NA	NA	NA
Styrene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	2.2	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	NA	<5	R	NA	5.3 J	<2.0	NA	<5	R	NA	<5	R
Toluene	<1	<1	<1	0.54 J	1	<1.0	0.15 J	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1	<1	<1.0	<1	<1	<1	<1	<1	<1
Xylene, o	NA	<1	<1	NA	<1	NA	NA	<1	<1	NA	<1	<1
Xylenes (total)	<1	<3	<3	<1	<3	<3.0	<1	<3	<3	<1	<3	<3
Xylenes, m+p	NA	<2	<2	NA	<2	NA	NA	<2	<2	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-15 (continued)		GM-16						GM-17		
Top of Screen Depth (ft bls)	165	165	108	108	108	108	108	108	224.3	224.3	224.3
Sample Date	05/10/04	05/10/04	10/22/97	10/22/97	10/09/98	04/14/99	09/23/03	04/27/04	10/28/97	10/12/98	04/26/99
Sample ID	GWGM-15 (5/10/04)	GWGM-996 (5/10/04)	GM-16	GM-78	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)	GM-17	GWGM-17	GWGM-17
1,1-Dichloroethane	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,1-Dichloroethene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,2,4-Trimethylbenzene	<1.0	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	<1	<1
1,2-Dichloroethene (total)	<2.0	<2.0	NA	NA	<1	<1	<2.0	<2.0	NA	<1	<1
1,3,5-Trimethylbenzene	<1.0	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	<1	<1
1,3-Dichlorobenzene	<1.0	<1.0	<1	<1	<5	<5	<1.0	<1.0	<1	<5	<5
2-Butanone (MEK)	<50	<50	<10	<10	<10	<10 J	<10	<50	<10	<10	R
2-Hexanone	<50	<50	<10	<10	<10	<10	<10	<50	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<10	<10	<10	<10 J	<10	<50	<10	<10	<10 J
Acetone	<100	<100	<10	<10	<10	R	<25	<100	<10	<10	R
Acrylonitrile	<25	<25	NA	NA	<25	R	<20	<25	NA	<25	R
Benzene	<1.0	<1.0	0.12 J	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Bromoform	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Bromomethane	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Carbon disulfide	<5.0	<5.0	0.21 J	<1	<1	<1	<1.0	<5.0	0.70 J	<1	3.3
Chlorobenzene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroethane	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroform	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloromethane	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
cis-1,2-Dichloroethene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Diethylether	<10	<10	NA	NA	<10	<10	<2.0	<10	NA	<10	<10
Ethylbenzene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Furan	<2.0	<2.0	NA	NA	<5	<5	<5.0	<2.0	NA	<5	<5
Isopropylbenzene	<1.0	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	<1	<1
Methyl iodide	<5.0	<5.0	NA	NA	<5	<5	<1.0	<5.0	NA	<5	<5
Methyl(tert)butyl ether	<5.0	<5.0	NA	NA	<50	<50	<10	2.2 J	NA	<50	<50
Methylene chloride	<1.0	<1.0	<1	<1	<1	<1	<5.0	<1.0	0.41 JB	<1	<1
n-Propylbenzene	<1.0	<1.0	NA	NA	<1	<1	<1.0	<1.0	NA	<1	<1
Propionitrile	<25	<25	NA	NA	NA	NA	<20	<25	NA	NA	NA
Styrene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Tetrachloroethene	11	11	<1	<1	<1	<1	1.6	5.8	<1	<1	<1
Tetrahydrofuran	<2.0	<2.0	NA	NA	<5	R	<5.0	<2.0	NA	<5	<5 J
Toluene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	1.1	3.5	<1
trans-1,2-Dichloroethene	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Trichloroethene	<1.0	0.54 J	<1	<1	<1	<1	<1.0	0.49 J	<1	<1	<1
Vinyl chloride	<1.0	<1.0	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Xylene, o	NA	NA	NA	NA	<1	<1	NA	NA	NA	<1	<1
Xylenes (total)	<3.0	<3.0	<1	<1	<3	<3	<2.0	<3.0	<1	<3	<3
Xylenes, m+p	NA	NA	NA	NA	<2	<2	NA	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-18		GM-19	GM-20	GM-21					GM-22		
Top of Screen Depth (ft bls)	50	50	46	42	5	5	5	5	5	6	6	6
Sample Date	12/04/97	11/07/98	12/04/97	12/05/97	12/03/97	12/03/97	10/13/98	01/29/01	09/09/05	12/05/97	10/10/98	04/13/99
Sample ID	GM-18	GWGM-18	GM19	GM-20	GM-21	GM-95	GWGM-21	GWGM-21	GWGM-21 (9/9/05)	GM-22	GWGM-22	GWGM-22
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
1,2,4-Trimethylbenzene	NA	<1	NA	NA	NA	NA	<1	<1.0	<1.0	NA	<1	<1
1,2-Dichloroethene (total)	NA	<1	NA	NA	NA	NA	<1	<2.0	<2.0	NA	<1	<1
1,3,5-Trimethylbenzene	NA	<1	NA	NA	NA	NA	<1	<1.0	<1.0	NA	<1	<1
1,3-Dichlorobenzene	<1	<5	<1	<1	<1	<1	<5	<1.0	<1.0	<1	<5	<5
2-Butanone (MEK)	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10 J
2-Hexanone	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10 J
Acetone	<10	<10	<10	<10	<10	<10	<10	R	<100	<10	<10	R
Acrylonitrile	NA	<25	NA	NA	NA	NA	<25	<25 J	<25	NA	<25	R
Benzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Carbon disulfide	<1	<1	0.22 J	<1	<1	0.13 J	<1	<5.0	<5.0	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1.0	4.5	<1	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Diethylether	NA	<10	NA	NA	NA	NA	<10	<10	<10	NA	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Furan	NA	<5	NA	NA	NA	NA	<5	NA	<10	NA	<5	<5
Isopropylbenzene	NA	<1	NA	NA	NA	NA	<1	<1.0	<1.0	NA	<1	<1
Methyl iodide	NA	<5	NA	NA	NA	NA	<5	<5.0	<5.0	NA	<5	<5
Methyl(tert)butyl ether	NA	<50	NA	NA	NA	NA	<50	<5.0	NA	NA	<50	<50
Methylene chloride	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
n-Propylbenzene	NA	<1	NA	NA	NA	NA	<1	<1.0	<1.0	NA	<1	<1
Propionitrile	NA	NA	NA	NA	NA	NA	NA	<25	<25	NA	NA	NA
Styrene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Tetrahydrofuran	NA	<5	NA	NA	NA	NA	<5	NA	<2.0	NA	<5	R
Toluene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1	<1	<1
Xylene, o	NA	<1	NA	NA	NA	NA	<1	NA	NA	NA	<1	<1
Xylenes (total)	<1	<3	<1	<1	<1	<1	<3	<3.0	<3.0	<1	<3	<3
Xylenes, m+p	NA	<2	NA	NA	NA	NA	<2	NA	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-22 (continued)			GM-23				
Top of Screen Depth (ft bls)	6	6	6	3.5	3.5	3.5	3.5	3.5
Sample Date	01/15/01	09/08/05	09/08/05	12/03/97	10/10/98	01/16/01	05/12/04	05/12/04
Sample ID	GWGM-22	GWGM-22(9/8/05)	GWGM-999 (GM-22) (9/8/05)	GM-23	GWGM-23	GWGM-23	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	NA	<1	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	NA	<1	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	NA	<1	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1	<5	<1.0	<1.0	<1.0
2-Butanone (MEK)	4.6 J	<50	<50	<10	<10	5.3 J	<50	<50
2-Hexanone	<50	<50	<50	<10	<10	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<10	<10	<50	<50	<50
Acetone	R	<100	<100	<10	<10	R	<100	<100
Acrylonitrile	<25	<25	<25	NA	<25	<25	<25	<25
Benzene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<5.0	<5.0	0.20 J	<1	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloromethane	<1.0	2.6	2.3	<1	<1	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Diethylether	<10	<10	<10	NA	<10	<10	<10	<10
Ethylbenzene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Furan	NA	<10	<10	NA	<5	NA	<2.0	<2.0
Isopropylbenzene	<1.0	<1.0	<1.0	NA	<1	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5.0	NA	<5	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	NA	NA	NA	<50	<5.0	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	NA	<1	<1.0	<1.0	<1.0
Propionitrile	<25	<25	<25	NA	NA	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Tetrahydrofuran	NA	<10	<10	NA	<5	NA	<2.0	<2.0
Toluene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	<1	NA	NA	NA
Xylenes (total)	<3.0	<3.0	<3.0	<1	<3	<3.0	<3.0	<3.0
Xylenes, m+p	NA	NA	NA	NA	<2	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-23 (continued)	GM-24A		GM-24B	GM-24B			GM-24C	
Top of Screen Depth (ft bls)	3.5	71	71	104	104	104	104	193	193
Sample Date	09/08/05	11/09/98	05/04/99	11/17/98	11/17/98	05/05/99	04/29/04	11/20/98	11/20/98
Sample ID	GWGM-23(9/8/05)	GWGM-24A	GWGM-24A	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24C	GWGM-93
1,1-Dichloroethane	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
1,1-Dichloroethene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
1,2,4-Trimethylbenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
1,2-Dichloroethene (total)	<2.0	<1	<1	<1	<1	<1	<2.0	<1	<1
1,3,5-Trimethylbenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
1,3-Dichlorobenzene	<1.0	<5	<5	<5	<5	<5	<1.0	<5	<5
2-Butanone (MEK)	<50	<10	R	<10	<10	<10	<50	<10	<10
2-Hexanone	<50	<10	<10	<10	<10	<10	<50	<10	<10
4-Methyl-2-pentanone (MIBK)	<50	<10	<10 J	<10	<10	<10	<50	<10	<10
Acetone	<100	<10	R	<10	<10	R	<100	<10	<10
Acrylonitrile	<25	<25	R	<25	<25	R	<25	<25	<25
Benzene	<1.0	<1	<1	<1	<1	<1	0.39 J	<1	<1
Bromoform	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Bromomethane	<1.0	<1	<1	<1	<1	<1 J	<1.0	<1	<1
Carbon disulfide	<5.0	<1	<1	<1	<1	<1	<5.0	<1	<1
Chlorobenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Chloroethane	<1.0	<1	<1	<1	<1	<1 J	<1.0	<1	<1
Chloroform	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Chloromethane	8.5	<1	<1	<1	<1	<1	<1.0	<1	<1
cis-1,2-Dichloroethene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Diethylether	<10	<10	<10 J	<10	<10	<10	1.8 J	<10	<10
Ethylbenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Furan	<10	<5	<5	<5	<5	<5	0.17 J	<5	<5
Isopropylbenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Methyl iodide	<5.0	<5	<5	<5	<5	<5	<5.0	<5	<5
Methyl(tert)butyl ether	NA	<50	<50	<50	<50	<50	<5.0	<50	<50
Methylene chloride	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
n-Propylbenzene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Propionitrile	<25	NA	NA	NA	NA	NA	<25	NA	NA
Styrene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Tetrachloroethene	<1.0	<1	<1 J	<1	<1	<1	4.6	<1	<1
Tetrahydrofuran	<10	<5	R	<5	<5	R	<2.0	<5	<5
Toluene	<1.0	<1	<1	<1	<1	<1	<1.0	2.1	1.9
trans-1,2-Dichloroethene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Trichloroethene	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Vinyl chloride	<1.0	<1	<1	<1	<1	<1	<1.0	<1	<1
Xylene, o	NA	<1	<1	<1	<1	<1	NA	<1	<1
Xylenes (total)	<3.0	<3	<3	<3	<3	<3	<3.0	<3	<3
Xylenes, m+p	NA	<2	<2	<2	<2	<2	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C (continued)			GM-25A				GM-25B		
Top of Screen Depth (ft bls)	193	193	193	19	19	19	19	98	98	98
Sample Date	05/13/99	09/24/03	04/29/04	10/06/98	04/16/99	09/09/03	05/12/04	10/06/98	04/27/99	10/20/99
Sample ID	GWGM-24C	GM-24C	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GM-25A	GWGM-25A (5/12/04)	GWGM-25B	GWGM-25B	GM-25B
1,1-Dichloroethane	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
1,1-Dichloroethene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
1,2,4-Trimethylbenzene	<1	<1.0	<1.0	3.4	3.4	2	1.8	<25	<25	6.4 J
1,2-Dichloroethene (total)	<1	<2.0	<2.0	3.4	2.4	2.3	2.7	<25	<25	<20
1,3,5-Trimethylbenzene	<1	<1.0	<1.0	1.2	1.1	<1.0	0.66 J	<25	<25	<10
1,3-Dichlorobenzene	<5	<1.0	<1.0	<5	<5	<1.0	<1.0	<120	<120	<10
2-Butanone (MEK)	R	<10	<50	10	<10	<50	3.1 J	1,200	1,200 J	<500
2-Hexanone	<10	<10	<50	46	36	<50	10 J	<250	<250	<500
4-Methyl-2-pentanone (MIBK)	<10	<10	<50	<10	<10	<50	<50	<250	<250 J	<500
Acetone	R	<25	<100	<10	R	<100	<100	1,100	1,400 J	<1,000
Acrylonitrile	R	<20	<25	<25	<25 J	<25	<25	<25	R	<250
Benzene	<1	<1.0	<1.0	13	12	5.5	6.1	<25	<25	24
Bromoform	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Bromomethane	<1 J	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Carbon disulfide	5.7	<1.0	0.96 J	<1	<1	<5.0	<5.0	<25	<25	<50
Chlorobenzene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Chloroethane	<1 J	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10 J
Chloroform	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Chloromethane	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	28	<10 J
cis-1,2-Dichloroethene	<1	<1.0	<1.0	3.4	1.6	2.3	2.7	<25	<25	<10
Diethylether	<10 J	<2.0	<10	<10	<10	<10	4.8 J	<250	<250	<100
Ethylbenzene	<1	<1.0	<1.0	4.6	4.6	2.4	2.4	<25	<25	12
Furan	<5	<5.0	<2.0	<5	<5	<2.0	0.45 J	<120	<120	NA
Isopropylbenzene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Methyl iodide	<5	<1.0	<5.0	<5	<5	<5.0	<5.0	<25	<25	<50
Methyl(tert)butyl ether	<50	<10	<5.0	<50	<50	<5.0	<5.0	<1,200	<1,200	<50
Methylene chloride	<1	<5.0	<1.0	<1	<1	<1.0	<1.0	<25	<140	<10
n-Propylbenzene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Propionitrile	NA	<20	<25	NA	NA	<25	<25	NA	NA	<250
Styrene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Tetrachloroethene	<1	<1.0	7.6	<1	<1	<1.0	<1.0	<25	<25	<10
Tetrahydrofuran	R	<5.0	<2.0	14	15 J	<2.0	6.5	<120	<120 J	NA
Toluene	<1	<1.0	<1.0	14	14	7.1	7.4	32	28	32
trans-1,2-Dichloroethene	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Trichloroethene	<1	<1.0	<1.0	4	3.6	1.8	1.5	<25	<25	7.2 J
Vinyl chloride	<1	<1.0	<1.0	<1	<1	<1.0	<1.0	<25	<25	<10
Xylene, o	<1	NA	NA	6.1	5.9	NA	NA	<25	<25	NA
Xylenes (total)	<3	<2.0	<3.0	16	15	7.7	7.4	<75	<75	34
Xylenes, m+p	<2	NA	NA	9.5	9.2	NA	NA	<50	<50	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25B (continued)		GM-25C						
Top of Screen Depth (ft bls)	98	98	206	206	206	206	206	206	206
Sample Date	09/09/03	05/18/04	11/09/98	11/09/98	04/20/99	08/02/00	09/15/03	05/04/04	08/01/05
Sample ID	GM-25B	GWGM-25B (5/18/04)	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C	GM-25C	GWGM-25C (5/4/04)	GWGM-25C (08/01/05)
1,1-Dichloroethane	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	3.8 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<20	<1	<1	<1	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<10	<5	<5	<5	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	160	1,000	<10	<10	<10	<50	<50	4.2 J	<50
2-Hexanone	<50	140 J	<10	<10	<10	<50	<50	<50	2.1 J
4-Methyl-2-pentanone (MIBK)	<50	<500	<10	<10	<10	<50	<50	<50	2.8 J
Acetone	200	1,700	<10	<10	R	<100	<100	7.6 J	<100
Acrylonitrile	<25	<250	<25	<25	<25	<50	<25	<25	<25
Benzene	3.5	14	<1	<1	1.1	1.9	<1.0	4	5.2
Bromoform	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<50	<1	<1	<1	<5.0	13	<5.0	<5.0
Chlorobenzene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	10 J	25	25	28	35	15	32	22
Ethylbenzene	1.5	6.1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Furan	3.5	28	<5	<5	<5	NA	<2.0	0.58 J	<10
Isopropylbenzene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<50	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<50	<50	<50	<50	<5.0	<5.0	<5.0	NA
Methylene chloride	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<250	NA	NA	NA	<25	<25	<25	<25
Styrene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	2.1	46	8.6	8	11 J	NA	6	<2.0	11
Toluene	4.7	30	<1	<1	6.4	18	34	25	1.2
trans-1,2-Dichloroethene	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	3.8 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<10	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	<1	<1	<1	NA	NA	NA	NA
Xylenes (total)	4.8	22 J	<3	<3	<3	<3	<3.0	<3.0	<3.0
Xylenes, m+p	NA	NA	<2	<2	<2	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26A				GM-26B				
Top of Screen Depth (ft bls)	30	30	30	30	101	101	101	101	101
Sample Date	10/07/98	04/14/99	09/09/03	05/13/04	10/07/98	04/15/99	07/18/00	09/09/03	04/27/04
Sample ID	GWGM-26A	GWGM-26A	GM-26A	GWGM-26A (5/13/04)-RE	GWGM-26B	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B (4/27/04)
1,1-Dichloroethane	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	1.2	2	<1.0	2.1	<1	<1	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<1	<2	<2.0	<2.0	<1	<1	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1	<2	<1.0	0.66 J	<1	<1	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<5	<10	<1.0	<1.0	<5	<5	<1.0	<1.0	<1.0
2-Butanone (MEK)	25	51 J	<50	24 J	<10	<10 J	<50 J	<50	<50
2-Hexanone	26	51	<50	40 J	<10	<10	<50 J	<50	<50
4-Methyl-2-pentanone (MIBK)	<10	<20	<50	4.9 J	<10	<10 J	<50	<50	<50
Acetone	24	71 J	<100	25 J	<10	R	<100 J	<100	<100
Acrylonitrile	<25	R	<25	<25	<25	R	14 J	<25	<25
Benzene	22	21	21	23	<1	<1	<1.0	<1.0	<1.0
Bromoform	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Bromomethane	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Carbon disulfide	<1	<2	<5.0	<5.0	<1	<1	<5.0	<5.0	<5.0
Chlorobenzene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloroethane	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloroform	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Chloromethane	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Diethylether	23	39	58	42	<10	<10	<10	<10	<10
Ethylbenzene	2.5	5.3	2	4.9	<1	<1	<1.0	<1.0	<1.0
Furan	<5	<10	<2.0	0.86 J	<5	<5	NA	<2.0	<2.0
Isopropylbenzene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Methyl iodide	<5	<5	<5.0	<5.0	<5	<5	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<50	<100	<5.0	<5.0	<50	<50	<5.0	<5.0	<5.0
Methylene chloride	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
n-Propylbenzene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Propionitrile	NA	NA	<25	<25	NA	NA	16 J	<25	<25
Styrene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Tetrachloroethene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Tetrahydrofuran	16	22 J	2.9	22	<5	R	NA	<2.0	<2.0
Toluene	11	16	9.7	17	<1	<1	27	<1.0	<1.0
trans-1,2-Dichloroethene	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Trichloroethene	<1	<2	<1.0	0.71 J	<1	<1	<1.0	<1.0	<1.0
Vinyl chloride	<1	<2	<1.0	<1.0	<1	<1	<1.0	<1.0	<1.0
Xylene, o	4.6	7.1	NA	NA	<1	<1	NA	NA	NA
Xylenes (total)	9.5	16	7.3	14	<3	<3	<3.0	<3.0	<3.0
Xylenes, m+p	<2	9.3	NA	NA	<2	<2	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B (continued)	GM-26C					GM-27A		
Top of Screen Depth (ft bls)	101	160	160	160	160	160	30	30	30
Sample Date	07/28/05	10/25/98	04/17/99	09/16/03	05/18/04	05/18/04	10/08/98	04/15/99	09/10/03
Sample ID	GWGM-26B (072805)	GWGM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)	GWGM-994 (5/18/04)	GWGM-27A	GWGM-27A	GM-27A
1,1-Dichloroethane	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
1,1-Dichloroethene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
1,2,4-Trimethylbenzene	<1.0	<1	<2	<1.0	<10	<10	1.9	2.1	2.6
1,2-Dichloroethene (total)	<2.0	<1	<2	<2.0	<20	<20	<1	<2	<2.0
1,3,5-Trimethylbenzene	<1.0	<1	<2 J	<1.0	<10	<10	<1	<2	1.1
1,3-Dichlorobenzene	<1.0	<5	<10	<1.0	<10	<10	<5	<10	<1.0
2-Butanone (MEK)	<50	10	<20	<50	34 J	26 J	<10	<20 J	<50
2-Hexanone	<50	70 J	100	120	140 J	150 J	35	30	<50
4-Methyl-2-pentanone (MIBK)	<50	<10	<20	<50	<500	<500	<10	<20	<50
Acetone	<100	<10 J	20 J	<100	75 J	59 J	<10	R	<100
Acrylonitrile	<25	<25	<25 J	<25	<250	<250	<25	R	<25
Benzene	<1.0	28	27	25	22	22	24	25	21
Bromoform	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Bromomethane	<1.0	<1	<2	<1.0	<10	<10	<1	<2	3
Carbon disulfide	<5.0	<1	<2	<5.0	<50	<50	<1	<2	<5.0
Chlorobenzene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Chloroethane	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Chloroform	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Chloromethane	<1.0	<1	<2	<1.0	<10	<10	<1	<2	1.1
cis-1,2-Dichloroethene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Diethylether	<10	39	41	27	26 J	26 J	16	34	26
Ethylbenzene	<1.0	1.8	3	5.3	4.9 J	4.4 J	4.1	4.9	4.8
Furan	<10	<5	<10	<2.0	2.5 J	<20	<5	<10	<2.0
Isopropylbenzene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Methyl iodide	<5.0	<5	<5	<5.0	<50	<50	<5	<5	<5.0
Methyl(tert)butyl ether	NA	<50	<100	<5.0	<50	<50	<50	<100	<5.0
Methylene chloride	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
n-Propylbenzene	<1.0	<1	<2 J	<1.0	<10	<10	<1	<2	<1.0
Propionitrile	<25	NA	NA	<25	<250	<250	NA	NA	<25
Styrene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Tetrachloroethene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Tetrahydrofuran	<10	21	33 J	<2.0	51	47	17	22 J	3
Toluene	<1.0	18	23	31	78	85	16	19	16
trans-1,2-Dichloroethene	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Trichloroethene	<1.0	<1	<2	1.9	<10	<10	1.3	3.2	1.4
Vinyl chloride	<1.0	<1	<2	<1.0	<10	<10	<1	<2	<1.0
Xylene, o	NA	<1	5.8	NA	NA	NA	<1	7.4	NA
Xylenes (total)	<3.0	7.6	11	20	19 J	18 J	15	17	16
Xylenes, m+p	NA	<2	5.5	NA	NA	NA	<2	9.8	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)	GM-27B						
Top of Screen Depth (ft bls)	30	145	145	145	145	145	145	145
Sample Date	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04	04/30/04	08/05/05
Sample ID	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)	GWGM-998 (4/30/04)	GWGM-27B (08/05/05)
1,1-Dichloroethane	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	2.3	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<1	<1	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	0.83 J	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<5	<5	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	37 J	<10	<10 J	<50 J	<50	<50	<50	<50
2-Hexanone	36 J	<10	<10	<50 J	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	3.7 J	<10	<10 J	<50	<50	<50	<50	<50
Acetone	39 J	<10	R	<100 J	<100	<100	<100	<100
Acrylonitrile	<25	<25	R	R	<25	<25	<25	<25
Benzene	23	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<1	4.7	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	0.46 J	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Diethylether	31	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	4.9	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Furan	1.1 J	<5	<5	NA	<2.0	<2.0	<2.0	<10
Isopropylbenzene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<50	<50	<5.0	<5.0	<5.0	<5.0	NA
Methylene chloride	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	NA	NA	<25	<25	<25	<25	<25
Styrene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	16	<5	R	NA	<2.0	<2.0	<2.0	<10
Toluene	18	<1	<1	2.7	<1.0	37	34	<1.0
trans-1,2-Dichloroethene	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	1.4	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	<1	<1	NA	NA	NA	NA	NA
Xylenes (total)	16	<3	<3	<3.0	<3.0	<3.0	<3.0	<3.0
Xylenes, m+p	NA	<2	<2	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B (continued)	GM-27C							
Top of Screen Depth (ft bls)	145	210	210	210	210	210	210	210	210
Sample Date	12/07/06	11/09/98	12/02/98	04/26/99	04/26/99	08/07/00	09/11/03	04/30/04	08/05/05
Sample ID	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C	GM-27C	GWGM-27C (4/30/04)	GWGM-27C (08/05/05)
1,1-Dichloroethane	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<1 J	<1	<1	<1	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<5 J	<5	<5	<5	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	<10 J	<10	R	R	<50	<50	<50	<50
2-Hexanone	<50	<10 J	<10	<10	<10	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	<10 J	<10	<10 J	<10 J	<50	<50	<50	<50
Acetone	<100	R	<10	R	R	<100	<100	<100	<100
Acrylonitrile	<25	<25 J	<25	R	R	<25	<25	<25	<25
Benzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromoform	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1 J	<1	<1	<1	<1.0 J	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<1 J	<1	<1	<1	<5.0	7.2	<5.0	<5.0
Chlorobenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1 J	<1	<1	<1	<1.0 J	<1.0	<1.0	<1.0
Chloroform	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	<10 J	<10	<10	<10	R	<10	0.31 J	1.0 J
Ethylbenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Furan	<10	<5 J	<5	<5	<5	NA	<2.0	<2.0	<10
Isopropylbenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5 J	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<50 J	<50	<50	<50	<5.0	<5.0	<5.0	NA
Methylene chloride	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	NA	NA	NA	NA	<25	<25	<25	<25
Styrene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<10	<5 J	<5	<5 J	<5 J	NA	<2.0	<2.0	<10
Toluene	<1.0	33 J	22	6	6.3	39	1.1	34	<1.0
trans-1,2-Dichloroethene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1 J	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	<1 J	<1	<1	<1	NA	NA	NA	NA
Xylenes (total)	<3.0	<3 J	<3	<3	<3	<3.0	<3.0	<3.0	<3.0
Xylenes, m+p	NA	<2 J	<2	<2	<2	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A						
Top of Screen Depth (ft bls)	40	40	40	40	40	40	40
Sample Date	10/28/98	04/19/99	07/19/00	04/28/04	07/26/05	07/26/05	12/05/06
Sample ID	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A (4/28/04)	GWGM28A (072605)	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)
1,1-Dichloroethane	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1	1	<1.0	0.37 J	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1	<1 J	<1.0	0.66 J	0.54 J	0.55 J	<1.0
1,2-Dichloroethene (total)	2.8	3.3	5.7	18	13	13	3.5
1,3,5-Trimethylbenzene	<1	<1 J	<1.0	0.64 J	0.55 J	0.55 J	<1.0
1,3-Dichlorobenzene	<5	<5	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<10	<10 J	<50 J	<50	<50	<50	<50
2-Hexanone	<10	<10	<50 J	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<10	<10 J	<50	<50	<50	<50	<50 *
Acetone	<10	R	<100 J	<100	<100	<100	<100
Acrylonitrile	<25	<25 J	R	<25	<25	<25	<25
Benzene	1.9	1.2	3.2	7.3	5.5	5.2	2.2
Bromoform	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<1	<1	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1	<1	<1.0	<1.0	<1.0	<1.0	0.57 J
cis-1,2-Dichloroethene	2.2	2.2	4.5	15	11	11	2.8
Diethylether	<10	<10	<10	0.30 J	<10	<10	<10
Ethylbenzene	<1	1.1	1.4	5.1	3.9	3.8	0.99 J
Furan	<5	<5	NA	<2.0	<10	<10	<10
Isopropylbenzene	<1	<1	<1.0	0.43 J	<1.0	<1.0	<1.0
Methyl iodide	<5	<5	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<50	<50	<5.0	<5.0	NA	NA	<5.0
Methylene chloride	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1	<1 J	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	NA	NA	<25	<25	<25	<25	<25
Styrene	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<5	R	NA	<2.0	<10	<10	<10
Toluene	<1	<1	2.7	1	0.98 J	0.88 J	<1.0
trans-1,2-Dichloroethene	<1	1.1	1.2	2.2	1.7	1.7	<1.0
Trichloroethene	<1	1.3	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	<1	<1	NA	NA	NA	NA	NA
Xylenes (total)	<3	<3	2.0 J	8.5	6.9	7	<3.0
Xylenes, m+p	<2	<2	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B							
Top of Screen Depth (ft bls)	124.5	124.5	124.5	124.5	124.5	124.5	124.5	124.5
Sample Date	11/08/98	11/08/98	04/19/99	04/19/99	04/28/04	04/28/04	07/26/05	12/05/06
Sample ID	GWGM-28B	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B (4/28/04)	GWGM-999 (4/28/04)	GWGM28B (072605)	GWGM-28B(12/5/06)
1,1-Dichloroethane	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<1	<1	<1	<1	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1	<1	<1 J	<1 J	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<5	<5	<5	<5	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<10	<10	<10	<10	<50	<50	<50	<50
2-Hexanone	<10	<10	<10	<10	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<10	<50	<50	<50	<50 *
Acetone	<10	<10	R	R	<100	<100	<100	<100
Acrylonitrile	<25	<25	R	R	<25	<25	<25	<25
Benzene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromoform	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<1	<1	12	16	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1	<1	<1	<1	<1.0	<1.0	<1.0	0.74 J
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Furan	<5	<5	<5	<5	<2.0	<2.0	<10	<10
Isopropylbenzene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<50	<50	<50	<50	<5.0	<5.0	NA	<5.0
Methylene chloride	<1	<1	<1.4	<1.4	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1	<1	<1 J	<1 J	<1.0	<1.0	<1.0	<1.0
Propionitrile	NA	NA	NA	NA	<25	<25	<25	<25
Styrene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<5	<5	R	R	<2.0	<2.0	<10	<10
Toluene	<1	<1	1.6	1.7	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Xylene, o	<1	<1	<1	<1	NA	NA	NA	NA
Xylenes (total)	<3	<3	<3	<3	<3.0	<3.0	<3.0	<3.0
Xylenes, m+p	<2	<2	<2	<2	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29							GM-30	
Top of Screen Depth (ft bls)	55	55	55	55	55	55	55	75	75
Sample Date	10/09/98	10/09/98	04/16/99	09/10/03	05/03/04	07/28/05	12/08/06	10/27/98	05/12/99
Sample ID	GWGM-29	GWGM-99	GWGM-29	GM-29	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30
1,1-Dichloroethane	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
1,2,4-Trimethylbenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
1,2-Dichloroethene (total)	<1	<1	<1	<2.0	<2.0	<2.0	<2.0	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
1,3-Dichlorobenzene	<5	<5	<5	<1.0	<1.0	<1.0	<1.0	<5	<5
2-Butanone (MEK)	<10	<10	<10	<50	<50	<50	<50	<10	R
2-Hexanone	<10	<10	<10	<50	<50	<50	<50	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<50	<50	<50	<50	<10	<10
Acetone	<10	<10	R	<100	<100	<100	<100	<10	R
Acrylonitrile	<25	<25	<25 J	<25	<25	<25	<25	<25	R
Benzene	3.6	3.7	2.8	1.6	0.72 J	0.80 J	<1.0	<1	<1
Bromoform	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Bromomethane	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1 J
Carbon disulfide	<1	<1	<1	<5.0	<5.0	<5.0	<5.0	<1	<1
Chlorobenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Chloroethane	<1	<1	<1	1.1	<1.0	<1.0	<1.0	<1	<1 J
Chloroform	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Chloromethane	<1	<1	<1	2.3	<1.0	<1.0	<1.0	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Diethylether	<10	<10	<10	<10	1.8 J	2.1 J	1.8 J	<10	<10 J
Ethylbenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Furan	<5	<5	<5	<2.0	<2.0	<10	<10	<5	<5
Isopropylbenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Methyl iodide	<5	<5	<5	<5.0	<5.0	<5.0	<5.0	<5	<5
Methyl(tert)butyl ether	<50	<50	<50	<5.0	<5.0	NA	<5.0	<50	<50
Methylene chloride	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1.1
n-Propylbenzene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Propionitrile	NA	NA	NA	<25	<25	<25	<25	NA	NA
Styrene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Tetrachloroethene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Tetrahydrofuran	<5	<5	R	<2.0	<2.0	<10	<10	<5	R
Toluene	1.6	1.6	1.2	<1.0	<1.0	<1.0	<1.0	1.2	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Trichloroethene	<1	<1	1.1	<1.0	<1.0	<1.0	<1.0	<1	<1
Vinyl chloride	<1	<1	<1	<1.0	<1.0	<1.0	<1.0	<1	<1
Xylene, o	<1	<1	<1	NA	NA	NA	NA	<1	<1
Xylenes (total)	<3	<3	<3	<3.0	<3.0	<3.0	<3.0	<3	<3
Xylenes, m+p	<2	<2	<2	NA	NA	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-30 (continued)	GM-31		GM-32					GM-33	
Top of Screen Depth (ft bls)	75	105	105	135	135	135	135	135	74	74
Sample Date	05/12/99	10/24/98	05/03/99	10/25/98	04/27/99	09/25/03	05/26/04	09/25/03	12/03/98	05/10/99
Sample ID	GWGM-83	GWGM-31	GWGM-31	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GM-32-DL	GWGM-33	GWGM-33
1,1-Dichloroethane	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
1,1-Dichloroethene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
1,2,4-Trimethylbenzene	<1	<1	<1	<50	<40	5.9	6.0 J	17 D	<1	<1
1,2-Dichloroethene (total)	<1	<1	<1	<50	<40	<10	<20	<20	<1	<1
1,3,5-Trimethylbenzene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
1,3-Dichlorobenzene	<5	<5	<5	<250	<200	<5.0	<10	<10	<5	<5
2-Butanone (MEK)	R	<10	<10	1,800	1,700	1,900	1,700	1,500 D	<10	<10
2-Hexanone	<10	<10 J	<10 J	<500 J	<400 J	270	160 J	300 D	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10	<10 J	<500	<400 J	<50	<500	<100	<10	<10
Acetone	R	<10 J	R	2,900 J	2,600 J	3,100 E	3,200	1,800 D	<10	R
Acrylonitrile	R	<25	R	<50	R	<100	<250	<200	<25	<25 J
Benzene	<1	<1	<1	<50	<40	15	15	19 D	<1	<1
Bromoform	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Bromomethane	<1 J	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Carbon disulfide	<1	<1	3.4	<50	150	7.7	8.2 J	<10	1.8	<1
Chlorobenzene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Chloroethane	<1 J	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Chloroform	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Chloromethane	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Diethylether	<10 J	<10	<10	<500	<400	<10	4.2 J	<20	<10	<10
Ethylbenzene	<1	<1	<1	<50	<40	5.7	5.9 J	13 D	<1	<1
Furan	<5	<5	<5	<250	<200	<25	24	<50	<5	<5
Isopropylbenzene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Methyl iodide	<5	<5	<5	<50	<40	<5.0	<50	<10	<5	<5
Methyl(tert)butyl ether	<50	<50	<50	<2,500	<2,000	<50	<50	<100	<50	<50
Methylene chloride	<1.2	<1	<1	<50	<40	<25	<10	<50	<1	<1
n-Propylbenzene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Propionitrile	NA	NA	NA	NA	NA	<100	<250	<200	NA	NA
Styrene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Tetrachloroethene	<1	<1	<1	<50	<40	<5.0	3.7 J	10 D	<1	<1
Tetrahydrofuran	R	<5	R	<250	R	<25	38	<50	<5	R
Toluene	<1	<1	<1	<50	<40	22	21	46 D	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Trichloroethene	<1	<1	<1	<50	<40	6.7	7.4 J	<10	<1	<1
Vinyl chloride	<1	<1	<1	<50	<40	<5.0	<10	<10	<1	<1
Xylene, o	<1	<1	<1	<50	<40	NA	NA	NA	<1	<1
Xylenes (total)	<3	<3	<3	<150	<120	26	26 J	68 D	<3	<3
Xylenes, m+p	<2	<2	<2	<100	<80	NA	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A			GM-34B				GM-35	
Top of Screen Depth (ft bls)	30	30	30	85	85	85	85	40	40
Sample Date	10/08/98	04/17/99	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04	11/04/98	05/04/99
Sample ID	GWGM-34A	GWGM-34A	GWGM-34A (4/29/04)	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)	GWGM-35	GWGM-35
1,1-Dichloroethane	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
1,1-Dichloroethene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
1,2,4-Trimethylbenzene	<1	<1 J	<1.0	<1	<1	<1.0	<1.0	1.2	<1
1,2-Dichloroethene (total)	<1	<1	<2.0	<1	<1	<2.0	<2.0	<1	<1
1,3,5-Trimethylbenzene	<1	<1 J	<1.0	<1	<1	<1.0	<1.0	<1	<1
1,3-Dichlorobenzene	<5	<5	<1.0	<5	<5	<1.0	<1.0	<5	<5
2-Butanone (MEK)	<10	<10 J	<50	<10	<10 J	<10	<50	<10	<10
2-Hexanone	<10	<10	<50	<10	<10	<10	<50	<10	<10
4-Methyl-2-pentanone (MIBK)	<10	<10 J	<50	<10	<10 J	<10	<50	<10	<10
Acetone	<10	R	<100	<10	R	<25	<100	<10	R
Acrylonitrile	<25	<25 J	<25	<25	R	<20	<25	<25	R
Benzene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Bromoform	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Bromomethane	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1 J
Carbon disulfide	<1	<1	<5.0	<1	<1	<1.0	<5.0	<1	<1
Chlorobenzene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Chloroethane	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1 J
Chloroform	<1	1	<1.0	<1	1.8	<1.0	0.45 J	<1	<1
Chloromethane	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Diethylether	<10	<10	<10	<10	<10	<2.0	1.5 J	<10	<10
Ethylbenzene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Furan	<5	<5	<2.0	<5	<5	<5.0	<2.0	<5	<5
Isopropylbenzene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Methyl iodide	<5	<5	<5.0	<5	<5	<1.0	<5.0	<5	<5
Methyl(tert)butyl ether	<50	<50	<5.0	<50	<50	<10	<5.0	<50	<50
Methylene chloride	<1	<1	<1.0	<1	<1	<5.0	<1.0	<1	<1
n-Propylbenzene	<1	<1 J	<1.0	<1	<1	<1.0	<1.0	<1	<1
Propionitrile	NA	NA	<25	NA	NA	<20	<25	NA	NA
Styrene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Tetrachloroethene	<1	<1	<1.0	<1	<1	1.5	7.4	<1	<1
Tetrahydrofuran	<5	R	<2.0	<5	R	<5.0	<2.0	<5	R
Toluene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Trichloroethene	<1	<1	<1.0	<1	<1	<1.0	0.46 J	<1	<1
Vinyl chloride	<1	<1	<1.0	<1	<1	<1.0	<1.0	<1	<1
Xylene, o	<1	<1	NA	<1	<1	NA	NA	<1	<1
Xylenes (total)	<3	<3	<3.0	<3	<3	<2.0	<3.0	<3	<3
Xylenes, m+p	<2	<2	NA	<2	<2	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-35 (continued)	GM-36			GM-37A				GM-37B
Top of Screen Depth (ft bls)	40	95	95	95	144	144	144	144	328
Sample Date	05/04/99	11/03/98	05/05/99	05/04/04	11/18/98	05/11/99	09/25/03	05/17/04	10/13/98
Sample ID	GWGM-84	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-37A	GWGM-37A	GM-37A	GWGM-37A (5/17/04)	GWGM-37B
1,1-Dichloroethane	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
1,1-Dichloroethene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
1,2,4-Trimethylbenzene	<1	<1	<1	<1.0	<12	<25	<1.0	2.3	<25
1,2-Dichloroethene (total)	<1	<1	<1	<2.0	<12	<25	<2.0	<2.0	<25
1,3,5-Trimethylbenzene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
1,3-Dichlorobenzene	<5	<5	<5	<1.0	<62	<120	<1.0	<1.0	<120
2-Butanone (MEK)	<10	<10	<10	<50	760	790 J	210	330	1,100
2-Hexanone	<10	<10	<10	<50	<120	<250	35	34 J	<250
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<50	<120	<250	<10	4.6 J	<250
Acetone	R	<10	R	<100	910	1,100 J	350	300	930
Acrylonitrile	R	<25	R	<25	<25	R	<20	<25	<25
Benzene	<1	<1	<1	<1.0	<12	<25	1.8	4.1	<25
Bromoform	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Bromomethane	<1 J	<1	<1 J	<1.0	<12	<25	<1.0	<1.0	<25
Carbon disulfide	<1	<1	<1	<5.0	19	40	<1.0	<5.0	42
Chlorobenzene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Chloroethane	<1 J	<1	<1 J	<1.0	<12	<25	<1.0	<1.0	<25
Chloroform	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Chloromethane	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
cis-1,2-Dichloroethene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Diethylether	<10	<10	<10	<10	<120	<250	<2.0	3.3 J	<250
Ethylbenzene	<1	<1	<1	<1.0	<12	<25	<1.0	2.4	<25
Furan	<5	<5	<5	<2.0	<62	<120	<5.0	9.4	<120
Isopropylbenzene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Methyl iodide	<5	<5	<5	<5.0	<12	<25	<1.0	<5.0	<25
Methyl(tert)butyl ether	<50	<50	<50	<5.0	<620	<1,200	<10	<5.0	<1,200
Methylene chloride	<1	<1	<1	<1.0	<12	<27 KB	<5.0	<1.0	<25
n-Propylbenzene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Propionitrile	NA	NA	NA	<25	NA	NA	<20	<25	NA
Styrene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Tetrachloroethene	<1	<1	<1	2.5	<12	<25	<1.0	2.8	<25
Tetrahydrofuran	R	<5	R	<2.0	<62	R	<5.0	9.9	<120
Toluene	<1	<1	<1	<1.0	<12	<25	2.7	8.2	<25
trans-1,2-Dichloroethene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Trichloroethene	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Vinyl chloride	<1	<1	<1	<1.0	<12	<25	<1.0	<1.0	<25
Xylene, o	<1	<1	<1	NA	<12	<25	NA	NA	<25
Xylenes (total)	<3	<3	<3	<3.0	<38	<75	3.4	10	<75
Xylenes, m+p	<2	<2	<2	NA	<25	<50	NA	NA	<50

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37B (continued)				GM-38A			GM-38B		GM-38C
Top of Screen Depth (ft bls)	328	328	328	328	95	95	95	160	160	200
Sample Date	05/14/99	09/25/03	05/27/04	09/25/03	10/13/98	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98
Sample ID	GWGM-37B	GM-37B	GWGM-37B (5/27/04)	GM-37B-DL	GWGM-38A	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C
1,1-Dichloroethane	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<25	3	3.3	<4.0	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	<25	<2.0	<2.0	<8.0	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
1,3-Dichlorobenzene	<120	<1.0	<1.0	<4.0	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	870 J	480 E	290	540 D	<10	<10	<10 J	<10	R	<10
2-Hexanone	<250	120	63	130 D	<10	<10	<10	<10	<10 J	<10
4-Methyl-2-pentanone (MIBK)	<250	<10	11 J	<40	<10	<10	<10 J	<10	<10 J	<10
Acetone	1,200 J	650 E	290	680 D	<10	<10	R	<10	R	<10
Acrylonitrile	R	<20	<25	<80	<25	<25	R	<25	R	<25
Benzene	<25	9.8	10	8.2 D	<1	<1	<1	<1	<1	<1
Bromoform	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Bromomethane	<25 J	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Carbon disulfide	<25	<1.0	0.94 J	<4.0	<1	<1	<1	<1	<1	<1
Chlorobenzene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Chloroethane	<25 J	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Chloroform	<25	<1.0	<1.0	<4.0	2.4	2.5	3.8	<1	<1	<1
Chloromethane	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<25	<1.0	0.84 J	<4.0	<1	<1	<1	<1	<1	<1
Diethylether	<250 J	4.7	3.7 J	<8.0	<10	<10	<10	13	24	<10
Ethylbenzene	<25	4.2	4	<4.0	<1	<1	<1	<1	<1	<1
Furan	<120	7.7	9.5	<20	<5	<5	<5	<5	<5	<5
Isopropylbenzene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Methyl iodide	<25	<1.0	0.38 JB	<4.0	<5	<5	<5	<5	<5	<5
Methyl(tert)butyl ether	<1,200	<10	<5.0	<40	<50	<50	<50	<50	<50	<50
Methylene chloride	<25	<5.0	<1.0	<20	<1	<1	<1	<1	<1	<1
n-Propylbenzene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Propionitrile	NA	<20	<25	<80	NA	NA	NA	NA	NA	NA
Styrene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<25	<1.0	1.3	<4.0	<1	<1	R	<1	<1	<1
Tetrahydrofuran	R	9.2	43	<20	<5	<5	<5	<5	R	<5
Toluene	<25	15	15	12 D	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Trichloroethene	<25	2.2	2.4	<4.0	<1	<1	<1	<1	<1	<1
Vinyl chloride	<25	<1.0	<1.0	<4.0	<1	<1	<1	<1	<1	<1
Xylene, o	<25	NA	NA	NA	<1	<1	<1	<1	<1	<1
Xylenes (total)	<75	16	16	13 D	<3	<3	<3	<3	<3	<3
Xylenes, m+p	<50	NA	NA	NA	<2	<2	<2	<2	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38C (continued)		GM-39			GM-40A			GM-40B	
Top of Screen Depth (ft bls)	200	200	85	85	85	75	75	75	120	120
Sample Date	10/20/98	04/30/99	10/12/98	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04	10/26/98	04/27/99
Sample ID	GWGM-97	GWGM-38C	GWGM-39	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)	GWGM-40B	GWGM-40B
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
1,2-Dichloroethene (total)	<1	<1	<1	<1	<1	<1	<1	<2.0	<25	93
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<1.0	<120	<120
2-Butanone (MEK)	<10	<10	<10	<10 J	<10 J	<10	R	1.6 J	1,100	1,200 J
2-Hexanone	<10	<10 J	<10	<10	<10	<10 J	<10	<50	<250	<250
4-Methyl-2-pentanone (MIBK)	<10	<10 J	<10	<10 J	<10 J	<10	<10 J	<50	<250	<250 J
Acetone	<10	R	<10	R	R	<10 J	R	<100	1,500	1,600 J
Acrylonitrile	<25	R	<25	R	R	<25	R	<25	<25	R
Benzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Carbon disulfide	1.6	<1	<1	<1	<1	<1	<1	<5.0	38	<25
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	26
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Chloroform	<1	<1	<1	1	<1	<1	<1	<1.0	<25	<25
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	93
Diethylether	<10	12	<10	<10	<10	<10	<10	<10	<250	<250
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Furan	<5	<5	<5	<5	<5	<5	<5	<2.0	<120	<120
Isopropylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Methyl iodide	<5	<5	<5	<5	<5	<5	<5	<5.0	<25	<25
Methyl(tert)butyl ether	<50	<50	<50	<50	<50	<50	<50	<5.0	<1,200	<1,200
Methylene chloride	<1	<1	<1	<1	<1	<1	<1.2	<1.0	<25	<25
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Propionitrile	NA	NA	NA	NA	NA	NA	NA	<25	NA	NA
Styrene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	1.4	<25	<25
Tetrahydrofuran	<5	R	<5	R	R	<5	R	<2.0	<120	R
Toluene	<1	<1	<1	<1	<1	<1	<1	<1.0	28	30
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Trichloroethene	<1	<1	<1	1.2	1.1	<1	<1	<1.0	<25	<25
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1.0	<25	<25
Xylene, o	<1	<1	<1	<1	<1	<1	<1	NA	<25	<25
Xylenes (total)	<3	<3	<3	<3	<3	<3	<3	<3.0	<75	<75
Xylenes, m+p	<2	<2	<2	<2	<2	<2	<2	NA	<50	<50

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B (continued)	GM-41		GM-42		GM-49	GM-50		GM-51	
Top of Screen Depth (ft bls)	120	40	40	72	72	83.5	80.5	80.5	67	67
Sample Date	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99	10/14/98	04/17/99	10/20/98	04/18/99
Sample ID	GWGM-40B (5/19/04)	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49	GWGM-50	GWGM-50	GWGM-51	GWGM-51
1,1-Dichloroethane	<10	1.4	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<10	<1	<1	<1	<1	<1	<1	1.5	<1	<1
1,2,4-Trimethylbenzene	7.8 J	<1	<1	<1	<1 J	<1 J	<1	<1	<1	<1
1,2-Dichloroethene (total)	<20	<1	<1	<1	<1	<1	11	18	<1	<1
1,3,5-Trimethylbenzene	<10	<1	<1	<1	<1 J	<1 J	<1	<1	<1	<1
1,3-Dichlorobenzene	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	1,100	<10	<10 J	<10	<10 J	<10 J	<10	<10	<10	<10
2-Hexanone	120	<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-pentanone (MIBK)	16 J	<10	<10	<10	<10 J	<10 J	<10	<10	<10	<10
Acetone	1,900	<10	R	<10	R	R	<10	R	<10	R
Acrylonitrile	<200	<25	R	<25	<25 J	<25 J	<25	<25 J	<25	<25 J
Benzene	13	<1	<1	<1	<1	<1	4	6.4	<1	<1
Bromoform	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	<10	<1	<1	<1	<1	<1	10	15	<1	<1
Diethylether	6.9 J	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	7.1 J	<1	<1	<1	<1	<1	2.3	4.3	<1	<1
Furan	15 J	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl iodide	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl(tert)butyl ether	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methylene chloride	<50	<1	<1	1.7	<1	<1	<1	<1	<1	<1.0
n-Propylbenzene	<10	<1	<1	<1	<1 J	<1 J	<1	<1	<1	<1
Propionitrile	<200	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	29 J	<5	R	<5	R	R	<5	R	<5	R
Toluene	17	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<10	<1	<1	<1	<1	<1	1.2	2.5	<1	<1
Trichloroethene	5.9 J	<1	<1	<1	<1	1.2 J	<1	1.4	<1	<1
Vinyl chloride	<10	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylene, o	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes (total)	26	<3	<3	<3	<3	<3	<3	<3	<3	<3
Xylenes, m+p	NA	<2	<2	<2	<2	<2	<2	<2	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-52	GM-53A	GM-53B		GM-54		GM-55			GM-56	
Top of Screen Depth (ft bls)	75	79	195	195	80	80	75	75	75	32	32
Sample Date	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98	05/01/99	10/24/98	05/01/99	05/01/99	10/21/98	04/20/99
Sample ID	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54	GWGM-54	GWGM-55	GWGM-55	GWGM-85	GWGM-56	GWGM-56
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4-Trimethylbenzene	<1 J	<1	1	1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethene (total)	4.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,3,5-Trimethylbenzene	<1 J	<1 J	<1	<1	<1	<1	<1	<1	<1	<1	<1 J
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone (MEK)	<10 J	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<10	<10	<10	<10 J	<10 J	<10 J	<10 J	<10 J	<10 J	<10	<10
4-Methyl-2-pentanone (MIBK)	<10 J	<10	<10	<10 J	<10	<10 J	<10	<10 J	<10 J	<10	<10
Acetone	R	R	<10	R	<10 J	R	<10 J	R	R	<10	R
Acrylonitrile	<25 J	R	<25	R	<25	R	<25	R	R	<25	R
Benzene	2	<1	7.6	9.2	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon disulfide	<1	<1	4.3	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,2-Dichloroethene	3.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Diethylether	<10	<10	25	16	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Furan	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Isopropylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl iodide	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Methyl(tert)butyl ether	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Methylene chloride	<1	<1	<1	<1	<1	<1	<1	<1.6	<1	<1	<1
n-Propylbenzene	<1 J	<1 J	<1	<1	<1	<1	<1	<1	<1	<1	<1 J
Propionitrile	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrahydrofuran	R	R	9.9	6.0 J	<5	R	<5	R	R	<5	R
Toluene	<1	<1	2.7	3	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	1.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichloroethene	1.4	1.1	2.7	2.8	<1	<1	<1	<1	<1	<1	<1
Vinyl chloride	<1	<1	<1	NA	<1	<1	<1	<1	<1	<1	<1
Xylene, o	<1	<1	<1	1.7	<1	<1	<1	<1	<1	<1	<1
Xylenes (total)	<3	<3	3.8	4.1	<3	<3	<3	<3	<3	<3	<3
Xylenes, m+p	<2	<2	<2	2.4	<2	<2	<2	<2	<2	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-57		GM-59		GM-60	GM-61	GM-62A		GM-62B	
Top of Screen Depth (ft bls)	76	75	114	114	102	138	90	90	195	195
Sample Date	04/20/99	04/26/99	11/17/98	04/28/99	05/12/99	05/03/99	08/23/99	05/11/04	08/24/99	08/24/99
Sample ID	GWGM-57	GWGM-58	GWGM-59	GWGM-59	GWGM-60	GWGM-61	GWGM-62A	GWGM-62A (5/11/04)	GWGM-62B	GWGM-82
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1	<1	<1	<1	<1	<1	0.60 J	<1.0	2	2
1,2-Dichloroethene (total)	<1	<1	<1	<1	<1	<1	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<5	<5	<5	<5	<5	<5	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<10	R	<10	R	R	R	<50	<50	1,300 D	1,300 D
2-Hexanone	<10	<10	<10	<10	<10	<10 J	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<10	<10 J	<10	<10 J	<10	<10 J	<50	<50	130	130
Acetone	R	R	<10	R	R	R	<100	<100	940	940
Acrylonitrile	<25	R	<25	R	R	R	<25	<25	<25	<25
Benzene	<1	<1	<1	<1	<1	<1	1.2	0.45 J	13	13
Bromoform	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<1	<1	<1	<1	<1	<1	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1	<1	<1	<1	<1	<1	<1.0	<1.0	3.5	3.7
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	0.67 J
Diethylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Ethylbenzene	<1	<1	<1	<1	<1	<1	0.85 J	0.40 J	2.6	2.6
Furan	<5	<5	<5	<5	<5	<5	NA	<2.0	NA	NA
Isopropylbenzene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5	<5	<5	<5	<5	<5	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<50	<50	<50	<50	<50	<50	<5.0	<5.0	<5.0	<5.0
Methylene chloride	<1	<1	1.2	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Propionitrile	NA	NA	NA	NA	NA	NA	<25	<25	<25	<25
Styrene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1	<1	<1	<1	<1	<1 J	<1.0	3.8	<1.0	<1.0
Tetrahydrofuran	<5 J	<5 J	<5	R	R	R	NA	<2.0	NA	NA
Toluene	<1	<1	<1	<1	<1	21	1.6	0.65 J	16	16
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1	<1	<1	<1	<1	<1	<1.0	0.60 J	1	1.1
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1.0	<1.0	<1.0	<1.0
Xylene, o	<1	<1	<1	<1	<1	<1	NA	NA	NA	NA
Xylenes (total)	<3	<3	<3	<3	<3	<3	2.4 J	<3.0	12	13
Xylenes, m+p	<2	<2	<2	<2	<2	<2	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62B (continued)	GM-62C			GM-63A		
Top of Screen Depth (ft bls)	195	315	315	315	45	45	45
Sample Date	05/19/04	08/24/99	05/18/04	05/18/04	08/29/00	09/19/00	09/15/03
Sample ID	GWGM-62B (5/19/04)	GWGM-62C	GWGM-62C (5/18/04)	GWGM-62C (5/18/04)-DL	GWGM-63A	GWGM-63A	GM-63A
1,1-Dichloroethane	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<5.0	2.3	<1.0	<5.0	<1.0	1.4	<1.0
1,2-Dichloroethene (total)	<10	<2.0	<2.0	<10	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<5.0	<1.0	<1.0	<5.0	<1.0	0.53 J	<1.0
1,3-Dichlorobenzene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	540	780	390	190 DJ	<50	<50	<50
2-Hexanone	43 J	<50	38 J	20 DJ	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<250	160	<50	<250	<50	<50	<50
Acetone	660	690	690 E	220 DJ	<100	<100	<100
Acrylonitrile	<120	<25	<25	<120	<25	<25	<25
Benzene	4.7 J	9.1	2.1	1.8 DJ	9.5	17	5.9
Bromoform	<5.0	<1.0	<1.0	<5.0	<1.0 J	<1.0	<1.0
Bromomethane	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0 J	<1.0
Carbon disulfide	<25	<5.0	4.2 J	<25	<5.0	<5.0	<5.0
Chlorobenzene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Chloroethane	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Chloroform	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Chloromethane	<5.0	3.6	<1.0	<5.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<5.0	0.53 J	<1.0	<5.0	<1.0	<1.0	<1.0
Diethylether	<50	<10	1.3 J	1.1 DJ	<10	41	15
Ethylbenzene	<5.0	6.4	1.3	<5.0	0.99 J	1.8	<1.0
Furan	6.4 J	NA	1.6 J	1.4 DJ	NA	NA	<2.0
Isopropylbenzene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Methyl iodide	<25	<5.0	<5.0	<25	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<25	<5.0	<5.0	<25	<5.0	<5.0	<5.0
Methylene chloride	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
n-Propylbenzene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Propionitrile	<120	<25	<25	<120	<25	<25	<25
Styrene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Tetrachloroethene	2.2 J	<1.0	1.9	1.8 DJ	<1.0	<1.0	<1.0
Tetrahydrofuran	45	NA	12	8.3 DJ	NA	NA	<2.0
Toluene	<5.0	15	6.1	4.7 DJ	5.8	12	4.4
trans-1,2-Dichloroethene	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Trichloroethene	<5.0	2.5	0.60 J	<5.0	<1.0	<1.0	<1.0
Vinyl chloride	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	<15	15	3.4	2.2 DJ	4.5	8.4	3.6
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A (continued)	GM-63B			GM-64A			
Top of Screen Depth (ft bls)	45	105	105	105	33	33	33	33
Sample Date	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00	10/03/00	09/08/03	05/04/04
Sample ID	GWGM-63A (5/5/04)	GWGM-63B	GM-63B	GWGM-63B (4/27/04)	GWGM-64A	GWGM-64A	GM-64A	GWGM-64A (5/4/04)
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	0.61 J
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	1.2 J	<2.0	4.1
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	0.54 J
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50 J	<50	<50
2-Hexanone	<50	<50	<50	<50	<50	<50 J	<50	1.5 J
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50 J	<50	<50
Acetone	<100	R	<100	<100	<100	<100 J	<100	<100
Acrylonitrile	<25	<25 J	<25	<25	<25	<25 J	<25	<25
Benzene	8.6	<1.0	<1.0	<1.0	4.8	3.2 J	3.1	5.6
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	8.5 J	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Chloromethane	<1.0	<1.0	1.3	<1.0	<1.0	<1.0 J	1.4	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	0.91 J	0.66 J	<1.0	3.2
Diethylether	17	<10	<10	<10	<10	<10 J	<10	4.3 J
Ethylbenzene	1.4	<1.0	<1.0	<1.0	1.8	1.2 J	1.9	2.8
Furan	0.42 J	NA	<2.0	<2.0	NA	NA	<2.0	0.19 J
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	0.54 J	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Propionitrile	<25	<25	<25	<25	<25	<25 J	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Tetrahydrofuran	<2.0	NA	<2.0	<2.0	NA	NA	<2.0	<2.0
Toluene	7.4	<1.0	<1.0	<1.0	3	1.7 J	1.8	3.1
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	0.50 J	<1.0	0.87 J
Trichloroethene	<1.0	<1.0	<1.0	<1.0	2.8	1.7 J	<1.0	1.2
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	3.3	<3.0	<3.0	<3.0	1.7 J	1.7 J	<3.0	3.1
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64B			GM-66A				GM-66B	
Top of Screen Depth (ft bls)	117	117	117	27	27	27	27	125	125
Sample Date	07/24/00	09/08/03	05/11/04	07/18/00	09/16/03	04/27/04	07/27/05	07/19/00	08/03/00
Sample ID	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-66A	GM-66A	GWGM-66A (4/27/04)	GWGM66A (072705)	GWGM-66B	GMGW-66B
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
1,2,4-Trimethylbenzene	0.62 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.72 J	<1
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.50 J	<1
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
2-Butanone (MEK)	<50 J	<50	<50	<50 J	<50	<50	<50	<50 J	<50
2-Hexanone	<50 J	<50	<50	<50 J	<50	<50	<50	<50 J	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
Acetone	<100 J	<100	<100	<100 J	<100	<100	<100	<100 J	<100
Acrylonitrile	R	<25	<25	R	<25	<25	<25	R	<25
Benzene	10	9.2	11	<1.0	<1.0	<1.0	<1.0	7.5	7.9
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1 J
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1 J
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.62 J	<1
Diethylether	<10	17	19	<10	<10	<10	<10	<10	R
Ethylbenzene	1.2	1.2	1.3	<1.0	<1.0	<1.0	<1.0	1.8	1.5
Furan	NA	<2.0	0.44 J	NA	<2.0	<2.0	<10	NA	NA
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	<5.0	<5.0	2.1 J	NA	<5.0	<5
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Propionitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Tetrahydrofuran	NA	<2.0	<2.0	NA	<2.0	<2.0	<10	NA	NA
Toluene	6.2	5.4	13	<1.0	<1.0	<1.0	<1.0	16	5.5
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.64 J	0.64 J
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	5	5.3	5.6	<3.0	<3.0	<3.0	<3.0	5.4	4.6
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66B (continued)				GM-67	GM-68		GM-70	GM-71
Top of Screen Depth (ft bls)	125	125	125	125	122	140	140	42	39
Sample Date	09/11/03	05/10/04	07/27/05	12/8/2006	08/07/00	08/31/00	09/26/00	08/17/00	08/21/00
Sample ID	GM-66B	GWGM-66B (5/10/04)	GWGM66B (072705)	GWGM-66B (12/8/06)	GWGM-67	GWGM-68	GWGM-68	GWGM-70	GWGM-71
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	1.1	0.98 J	1.3	0.66 J	<1.0	<1.0	<1.0	1.4	<1.0
1,2-Dichloroethene (total)	<2.0	1.4 J	1.8 J	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<1.0	0.55 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<50	<50
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	0.84 J	<50	<50	<50	<50	<50	<50
Acetone	<100	<100	<100	<100	<100	<100	<100	<100	<100
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25 J
Benzene	7.3	6.8	8.3	2.8	3	<1.0	<1.0	0.58 J	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0 J	<1.0	<1.0
Carbon disulfide	5.5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	1.4	1.4	1.8	1	<1.0	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	6.4 J	5.0 J	1.6 J	R	<10	<10	<10	<10
Ethylbenzene	2	1.5	2	0.88 J	<1.0	<1.0	<1.0	0.58 J	<1.0
Furan	<2.0	<2.0	<10	<10	NA	NA	NA	NA	NA
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0 J	<5.0 J
Methyl(tert)butyl ether	<5.0	<5.0	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	7.5	1.5	1.5	6.8
Tetrahydrofuran	<2.0	<2.0	3.6 J	<10	NA	NA	NA	NA	NA
Toluene	5.4	14	5.9	5.3	<1.0	0.99 J	<1.0	0.94 J	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	6.1	5.1	6.4	1.5 J	<3.0	<3.0	<3.0	3	<3.0
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-72 (continued)		GM-72A		GM-73	GM-74	GM-75	GM-76	
Top of Screen Depth (ft bls)	43	43	46	46	42	34	24	3	3
Sample Date	01/05/04	04/16/04	07/25/05	12/12/06	09/06/00	09/07/00	09/08/00	01/29/01	01/29/01
Sample ID	GWGM-72	GM-72	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)	GWGM-73	GWGM-74	GWGM-75	DUP.012901	GWGM-76
1,1-Dichloroethane	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
1,1-Dichloroethene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<20 *F65	11	15	14	<1.0	0.67 J	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<40 *F65	<10	15	5.3	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<20 *F65	3.2 J	3.9	3.9	<1.0	0.59 J	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<200 *F65	12 J	200	<50	<50	<50	<50	<50	<50
2-Hexanone	<200 *F65	8.5 J	58 J	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<200 *F65	10 J	30 J	<50	<50	<50	<50	<50	<50
Acetone	<500 *F65	<500	300	<100	<100	<100	<100	R	R
Acrylonitrile	<400 *F65	<120	<50	<25	<25	<25	<25	<25 J	<25 J
Benzene	<20 *F65	8	25	18	<1.0	<1.0	<1.0	<1.0	<1.0
Bromoform	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
Carbon disulfide	<20 *F65	4.4 J	26	2.6 J	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
Chloroform	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
Chloromethane	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<20 *F65	<5.0	15	5.3	<1.0	<1.0 J	<1.0	<1.0	<1.0
Diethylether	<40 *F65	3.7 J	7.6 J	5.7 J	<10	<10	<10	<10	<10
Ethylbenzene	<20 *F65	4.8 J	7.5	7.7	<1.0	<1.0	<1.0	<1.0	<1.0
Furan	<200 *F65	<10	2.7 J	2.1 J	NA	NA	NA	NA	NA
Isopropylbenzene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<20 *F65	<25	<10	<5.0	<5.0 J	<5.0 J	<5.0 J	<5.0	<5.0
Methyl(tert)butyl ether	<200 *F65	<25	NA	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	<100 *F65	<5.0	<2.0	<1.0	<2.2	<1 J	<2.5	<1.0	<1.0
n-Propylbenzene	<20 *F65	<5.0	<2.0	<1.0	<1.0	0.62 J	<1.0	<1.0	<1.0
Propionitrile	<400 *F65	<120	<50	<25	<25	<25	<25	<25	<25
Styrene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<20 *F65	<5.0	<2.0	<1.0	11	2.2	2.3	<1.0	<1.0
Tetrahydrofuran	<200 *F65	40	23	12	NA	NA	NA	NA	NA
Toluene	<20 *F65	7.8	26	18	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-Dichloroethene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
Trichloroethene	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<20 *F65	<5.0	<2.0	<1.0	<1.0	<1.0 J	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	<40 *F65	23	38	&37	<3.0	<3.0	<3.0	<3.0	<3.0
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-76 (continued)	GM-77			GM-78		
Top of Screen Depth (ft bls)	3	105	105	105	20	20	20
Sample Date	09/09/05	09/22/03	05/11/04	07/28/05	09/18/03	04/29/04	07/29/05
Sample ID	GWGM-76 (9/9/05)	GM-77	GWGM-77 (5/11/04)	GWGM-77 (072805)	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	0.45 J	<1.0	0.19 J	<1.0
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	11	2.5 J	<50	<50	<50	<50
2-Hexanone	<50	<10	1.3 J	1.8 J	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	<10	<50	<50	<50	<50	<50
Acetone	<100	<25	<100	<100	<100	<100	<100
Acrylonitrile	<25	<20	<25	<25	<25	<25	<25
Benzene	<1.0	8.3	7.2	8.2	<1.0	0.98 J	1.2
Bromoform	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<1.0	0.82 J	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	0.45 J	<1.0	<1.0	<1.0	<1.0
Diethylether	<10	10	8.4 J	9.0 J	<10	0.60 J	0.52 J
Ethylbenzene	<1.0	1.4	1.1	1.3	<1.0	<1.0	<1.0
Furan	<10	<5.0	0.28 J	<10	<2.0	<2.0	<10
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	NA	<10	<5.0	NA	<5.0	<5.0	NA
Methylene chloride	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<20	<25	<25	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<2.0	<5.0	<2.0	5.8 J	<2.0	<2.0	<10
Toluene	<1.0	5.7	14	4.8	<1.0	<1.0	0.97 J
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	<3.0	4.7	3.9	4.4	<3.0	<3.0	<3.0
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78 (continued)		GM-79			
Top of Screen Depth (ft bls)	20	20	25	25	25	25
Sample Date	07/29/05	12/08/06	09/18/03	04/26/04	07/29/05	12/04/06
Sample ID	GWGM-998 (7/29/05)	GWGM-78 (12/8/06)	GM-79 (9/18/03)	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	0.28 J	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50
2-Hexanone	<50	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50 *
Acetone	<100	<100	<100	<100	<100	<100
Acrylonitrile	<25	<25	<25	<25	<25	<25
Benzene	1.2	<1.0	1.2	1.1	1.6	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	0.59 J	<1.0	<1.0	<1.0	<1.0	<1.0
Diethylether	0.47 J	<10	<10	0.89 J	1.4 J	<10
Ethylbenzene	<1.0	<1.0	<1.0	0.39 J	<1.0	<1.0
Furan	<10	<10	<2.0	<2.0	<10	<10
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5.0	1.46 JB	<5.0	<5.0
Methyl(tert)butyl ether	NA	<5.0	<5.0	<5.0	NA	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<25	<25	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrahydrofuran	<10	<10	<2.0	<2.0	<10	<10
Toluene	0.90 J	<1.0	1.2	0.99 J	1.5	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	0.80 J	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA
Xylenes (total)	<3.0	<3.0	<3.0	<3.0	1.5 J	<3.0
Xylenes, m+p	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-82A		GM-84			GM-87A
Top of Screen Depth (ft bls)	82	82	77	77	77	32
Sample Date	06/02/04	06/05/04	08/19/04	08/01/05	12/12/06	12/05/06
Sample ID	GBGWGM-82/95 (6/3/04)	GBGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)	GWGM-84 (08/01/05)	GWGM-84 (12/12/06)	GWGM-87A (12/5/06)
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	0.55 J	<1.0	<1.0	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	1.6 J	<2.0	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	<1.0	0.22 J	<1.0	<1.0	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50
2-Hexanone	<50	5.1 J	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	<50	0.93 J	<50	<50	<50	<50 *
Acetone	<100	<100	<100	<100	<100	<100
Acrylonitrile	<25	<25	<25	<25	<25	<25
Benzene	0.46 J	3.2	<1.0	<1.0	<1.0	1.3
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	0.82 J	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	1.6	<1.0	<1.0	<1.0	0.82 J
Diethylether	<10	2.2 J	<10	<10	<10	2.6 J
Ethylbenzene	<1.0	1.2	0.54 J	<1.0	<1.0	0.71 J
Furan	<2.0	0.23 J	<2.0	<10	<10	<10
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	0.25 JB	0.19 JB	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	NA	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<25	<25	<25	<25	<25
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	4.8	<1.0	<1.0	<1.0
Tetrahydrofuran	<2.0	2.6	<2.0	<10	<10	0.86 J
Toluene	2	2.3	<1.0	<1.0	<1.0	1.5
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichloroethene	<1.0	1.3	<1.0	<1.0	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA
Xylenes (total)	<3.0	2.4 J	2.4 J	<3.0	<3.0	1.8 J
Xylenes, m+p	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-87A (continued)	GM-87B	GM-118D		GMSB-111[1]	GMSB-112[1]
Top of Screen Depth (ft bls)	32	117	54	54	--	--
Sample Date	12/05/06	12/05/06	10/21/98	04/29/99	08/19/03	09/03/03
Sample ID	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D	GBGWGMSB-111/26	GBGWGMSB-112/134
1,1-Dichloroethane	<1.0	<1.0	<1	<1	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1	<1	<1.0	<1.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1	<1	<1.0	<1.0
1,2-Dichloroethene (total)	<2.0	<2.0	<1	<1	7.9	<2.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1	<1	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<5	<5	<1.0	<1.0
2-Butanone (MEK)	<50	<50	<10	R	<50	<50
2-Hexanone	<50	<50	<10	<10 J	<50	<50
4-Methyl-2-pentanone (MIBK)	<50 *	<50 *	<10	<10 J	<50	<50
Acetone	<100	<100	<10	R	<100	<100
Acrylonitrile	<25	<25	<25	R	<25	<25
Benzene	1.3	<1.0	<1	<1	<1.0	19
Bromoform	<1.0	<1.0	<1	<1	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1	<1	<1.0	<1.0
Carbon disulfide	<5.0	<5.0	<1	<1	<5.0	<5.0
Chlorobenzene	<1.0	<1.0	<1	<1	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1	<1	<1.0	<1.0
Chloroform	<1.0	<1.0	<1	<1	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1	<1	<1.0	<1.0
cis-1,2-Dichloroethene	0.87 J	<1.0	<1	<1	7.9	<1.0
Diethylether	2.4 J	<10	<10	<10	<10	24
Ethylbenzene	0.64 J	<1.0	<1	<1	<1.0	5.8
Furan	<10	<10	<5	<5	<2.0	<2.0
Isopropylbenzene	<1.0	<1.0	<1	<1	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5	<5	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<5.0	<50	<50	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1	<1	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1	<1	<1.0	<1.0
Propionitrile	<25	<25	NA	NA	<25	<25
Styrene	<1.0	<1.0	<1	<1	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1	<1	6.5	<1.0
Tetrahydrofuran	0.76 J	<10	<5	R	<2.0	<2.0
Toluene	1.6	10	<1	<1	<1.0	20
trans-1,2-Dichloroethene	<1.0	<1.0	<1	<1	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1	<1	12	<1.0
Vinyl chloride	<1.0	<1.0	<1	<1	<1.0	<1.0
Xylene, o	NA	NA	<1	<1	NA	NA
Xylenes (total)	1.8 J	<3.0	<3	<3	<3.0	11
Xylenes, m+p	NA	NA	<2	<2	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-112[1] (continued)	GMSB-113[1]			GMSB-116[1]	
Top of Screen Depth (ft bls)	--	--	--	--	--	--
Sample Date	09/03/03	09/05/03	09/05/03	09/04/03	08/12/03	08/11/03
Sample ID	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27	GBGWGMSB-116/122	GBGWGMSB-116/32
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
2-Butanone (MEK)	<50	<50	<50	<50	<50	<100
2-Hexanone	<50	<50	<50	<50	<100	<100
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<100
Acetone	<100	<100	<100	<100	<200	<200
Acrylonitrile	<25	<25	<25	<25	<25	<50
Benzene	<1.0	15	<1.0	<1.0	10	<2.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Chloromethane	<1.0	3.6	<1.0	<1.0	<1.0	<2.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Diethylether	<10	15	27	<10	11	<20
Ethylbenzene	<1.0	3.8	<1.0	<1.0	2.4	<2.0
Furan	<2.0	<2.0	<2.0	<2.0	<2.0	<4.0
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	<5.0	<5.0	<10
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Propionitrile	<25	<25	<25	<25	<25	<50
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Tetrahydrofuran	<2.0	3.6	<2.0	<2.0	<2.0	<4.0
Toluene	<1.0	14	<1.0	<1.0	9.6	<2.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Trichloroethene	<1.0	1	<1.0	<1.0	4	<2.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
Xylene, o	NA	NA	NA	NA	NA	NA
Xylenes (total)	<3.0	11	<3.0	<3.0	11	<6.0
Xylenes, m+p	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-117[1]		GMSB-118[1]	GMSB-119[1]		GMSB-122[1]
Top of Screen Depth (ft bls)	--	--	--	--	--	--
Sample Date	08/14/03	08/15/03	08/16/03	08/18/03	08/17/03	09/08/03
Sample ID	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25	GBGWGMSB-119/125	GBGWGMSB-119/45	GBGWGMSB-122/145
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-Trimethylbenzene	0.48 BJ	0.78 BJ	3	0.34 J	0.25 J	1.1
1,2-Dichloroethene (total)	0.46 J	0.71 J	1.5 J	<2.0	<2.0	<2.0
1,3,5-Trimethylbenzene	0.31 J	0.58 J	1.1	0.15 J	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	0.27 J	<1.0	<1.0	<1.0
2-Butanone (MEK)	<50	<50	7.5 J	<50	<50	180
2-Hexanone	0.12 J	2.8 J	<50	<50	<50	96
4-Methyl-2-pentanone (MIBK)	0.083 J	1.2 J	<50	<50	<50	<50
Acetone	<100	13 J	12 J	9.3 J	8.0 J	190
Acrylonitrile	<25	<25	<25	<25	<25	<25
Benzene	16 B	22 B	7.6	2.3	0.61 J	22
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon disulfide	0.16 J	0.40 J	0.82 J	<5.0	0.31 J	<5.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloromethane	0.29 J	<1.0	<1.0	1.6	2	<1.0
cis-1,2-Dichloroethene	0.39 J	0.51 J	1.3	<1.0	<1.0	<1.0
Diethylether	28	27	4.4 J	2.0 J	<10	24
Ethylbenzene	1.2	2.2	4.3	0.55 J	0.32 J	7.6
Furan	<2.0	0.36 J	<2.0	<2.0	<2.0	2.4
Isopropylbenzene	0.13 J	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Propionitrile	<25	<25	<25	<25	<25	<25
Styrene	0.38 BJ	0.42 BJ	<1.0	0.44 J	0.48 J	<1.0
Tetrachloroethene	0.093 BJ	0.36 BJ	0.16 J	<1.0	<1.0	<1.0
Tetrahydrofuran	1.8 J	3.6	1.7 J	<2.0	<2.0	7.3
Toluene	5.5	13	8.7	1.3	0.61 J	23
trans-1,2-Dichloroethene	0.076 J	0.20 J	0.21 J	<1.0	<1.0	<1.0
Trichloroethene	<1.0	0.78 J	1.5	<1.0	<1.0	1.3
Vinyl chloride	<1.0	0.14 J	<1.0	<1.0	<1.0	<1.0
Xylene, o	NA	NA	NA	NA	NA	NA
Xylenes (total)	4.1	7.6	11	1.6 J	0.80 J	15
Xylenes, m+p	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-123[1]	Grailer	Hambel	Krans	Michaud	Schnieder	MPMW-4	MW-1B
Top of Screen Depth (ft bls)	--	--	--	--	--	--	--	86
Sample Date	09/09/03	08/07/03	08/06/03	08/06/03	08/06/03	08/07/03	02/26/02	06/27/97
Sample ID	GBGWGMSB-123/150	GBGW-53C	GBGW-101C	GBGW-101F	GBGW-101G	GBGW-113	GWMPMW-4 (2/26/02)	GWMW-1B
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA
1,2-Dichloroethene (total)	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
2-Butanone (MEK)	<50	<50	<50	<50	<50	<50	<50	<10
2-Hexanone	<50	<50	<50	<50	<50	<50	<50	<10
4-Methyl-2-pentanone (MIBK)	<50	<50	<50	<50	<50	<50	<50	<10
Acetone	<100	<100	<100	<100	<100	<100	11 J	<10
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	NA
Benzene	13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Bromoform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Carbon disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<1
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Diethylether	14	<10	<10	<10	<10	<10	<10	NA
Ethylbenzene	2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Furan	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA
Isopropylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA
Methyl iodide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
Methyl(tert)butyl ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
n-Propylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA
Propionitrile	<25	<25	<25	<25	<25	<25	<25	NA
Styrene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.93 J	<1
Tetrahydrofuran	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	NA
Toluene	9.6	<1.0	<1.0	<1.0	<1.0	<1.0	0.31 J	0.56 J
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.22 J	0.48 J
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1
Xylene, o	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes (total)	6.7	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	0.41 J
Xylenes, m+p	NA	NA	NA	NA	NA	NA	NA	NA

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-2B	MW-5		MW-8					MW-9A	UG-2	
Top of Screen Depth (ft bls)	102	83	83	133	133	133	133	133	57	48	48
Sample Date	06/28/97	10/22/98	04/30/99	06/29/97	06/29/97	10/24/98	05/03/99	05/12/04	07/02/97	10/27/98	05/03/99
Sample ID	GWMW-2B	GWMW-5	GWMW-5	GWGM-99	GWMW-8	GWMW-8	GWMW-8	GWMW-8 (5/12/04)	GWMW-9A	GWUG-2	GWUG-2
1,1-Dichloroethane	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
1,2,4-Trimethylbenzene	NA	<1	<1	NA	NA	<50	1.8	1.1	NA	<1	<1
1,2-Dichloroethene (total)	NA	<1	<1	NA	NA	<50	<1	4.9	NA	<1	<1
1,3,5-Trimethylbenzene	NA	<1	<1	NA	NA	<50	<1	0.31 J	NA	<1	<1
1,3-Dichlorobenzene	<1	<5	<5	<1	<1	<250	<5	<1.0	<10	<5	<5
2-Butanone (MEK)	<10	<10	<10 J	<10	<10	<500	<10	5.1 J	<100	<10	R
2-Hexanone	<10	<10	<10 J	10	<10	<500 J	<10 J	2.4 J	<100	<10	<10 J
4-Methyl-2-pentanone (MIBK)	<10	<10	<10 J	<10	<10	<500	<10 J	1.1 J	<100	<10	<10 J
Acetone	<10	<10	R	16	12	<500 J	R	9.2 J	<100	<10	R
Acrylonitrile	NA	<25	R	NA	NA	<50	R	<25	NA	<25	R
Benzene	<1	<1	<1	5.8	6.7	<50	3.8	3.3	23	<1	<1
Bromoform	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Carbon disulfide	0.95 J	<1	<1	31 J	0.29 J	<50	<1	0.98 J	120	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Chloroform	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
cis-1,2-Dichloroethene	<1	<1	<1	<1	0.11 J	<50	<1	4.9	<10	<1	<1
Diethylether	NA	<10	<10	NA	NA	<500	<10	3.1 J	NA	<10	<10
Ethylbenzene	<1	<1	<1	1.7	2	<50	1.1	1.2	<10	<1	<1
Furan	NA	<5	<5	NA	NA	<250	<5	0.48 J	NA	<5	<5
Isopropylbenzene	NA	<1	<1	NA	NA	<50	<1	<1.0	NA	<1	<1
Methyl iodide	NA	<5	<5	NA	NA	<50	<5	<5.0	NA	<5	<5
Methyl(tert)butyl ether	NA	<50	<50	NA	NA	<2500	<50	<5.0	NA	<50	<50
Methylene chloride	<1	<1	<1	<1	<1.0	<50	<8	<1.0	<10	<1	<1
n-Propylbenzene	NA	<1	<1	NA	NA	<50	<1	<1.0	NA	<1	<1
Propionitrile	NA	NA	NA	NA	NA	NA	NA	<25	NA	NA	NA
Styrene	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<50	<1	4.5	<10	<1	<1 J
Tetrahydrofuran	NA	<5	R	NA	NA	1,400	210 J	160	NA	<5	R
Toluene	0.50 J	<1	<1	5.4	6.4	<50	3.2	3.2	10	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Trichloroethene	<1	<1	<1	<1	<1	<50	<1	0.41 J	<10	<1	<1
Vinyl chloride	<1	<1	<1	<1	<1	<50	<1	<1.0	<10	<1	<1
Xylene, o	NA	<1	<1	NA	NA	<50	1.7	NA	NA	<1	<1
Xylenes (total)	<1	<3	<3	7	8.3	<150	4.5	4.2	<10	<3	<3
Xylenes, m+p	NA	<2	<2	NA	NA	<100	2.8	NA	NA	<2	<2

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4				UG-6	Residental	Residential	Residential	Final	Final	Groundwater
Top of Screen Depth (ft bls)	103	103	103	103	236	Direct	Indoor	Drinking	Acute	Chronic	Surface Water
Sample Date	10/13/97	10/13/97	10/23/98	05/02/99	10/21/97	Contact	Air	Water	Value	Value	Interface
Sample ID	GM-79	UG-4	GWUG-4	GWUG-4	UG-6	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria
1,1-Dichloroethane	<1	<1	<1	<1	<1	2,400,000	1,000,000	880	13,000	740	740
1,1-Dichloroethene	<1	<1	<1	<1	<1	11,000 (I)	200 (I)	7 (I) A	2,300	130	65 (I) X
1,2,4-Trimethylbenzene	NA	NA	<1	<1	NA	56,000 (I) S	56,000 (I) S	63 (I) E	310	17	17 (I)
1,2-Dichloroethene (total)	NA	NA	<1	<1	NA	--	--	--	19,000	1,100	--
1,3,5-Trimethylbenzene	NA	NA	<1	<1	NA	61,000 (I) S	61,000 (I) S	72 (I) E	810	45	45 (I)
1,3-Dichlorobenzene	<1	<1	<5	<5	<1	2,000	ID	6.6	420	38	38
2-Butanone (MEK)	<10	<10	<10	<10	<10	240,000,000 (I) S	240,000,000 (I) S	13,000 (I)	40,000	2,200 I	2,200 (I)
2-Hexanone	<10	<10	<10 J	<10 J	<10	5,200,000	4,200,000	1,000	ID	ID	--
4-Methyl-2-pentanone (MIBK)	<10	<10	<10	<10 J	<10	13,000,000 (I)	20,000,000 (I) S	1,800 (I)	ID	ID	(I) ID
Acetone	<10	<10	<10 J	R	<10	31,000,000 (I)	1,000,000,000 (I) D,S	730 (I)	30,000	1,700	1,700 (I)
Acrylonitrile	NA	NA	<25	R	NA	14,000 (I)	34,000 (I)	2.6 (I)	1,200	66	4.9 (I) X
Benzene	<1	<1	<1	<1	<1	11,000 (I)	5,600 (I)	5 (I) A	1,900	200	200 (I) X
Bromoform	<1	<1	<1	<1	<1	140,000	470,000	80 A,W	ID	ID	ID
Bromomethane	<1	<1	<1	<1	<1	70,000	4,000	10	640	35	35
Carbon disulfide	<1	<1	<1	<1	2.4	R	R	R	ID	ID	R
Chlorobenzene	<1	<1	<1	<1	<1	86,000 (I)	210,000 (I)	100 (I) A	850	47	47 (I)
Chloroethane	<1	<1	<1	<1	<1	440,000	5,700,000 S	430	20,000	1,100	ID
Chloroform	<1	<1	<1	<1	<1	150,000	28,000	80 A,W	11,000	630	170 X
Chloromethane	<1	<1	<1	<1	<1	490,000 (I)	8,600 (I)	260 (I)	ID	ID	(I) ID
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	200,000	93,000	70 A	11,000	620	620
Diethylether	NA	NA	<10	<10	NA	35,000,000	61,000,000 S	10 E	NA	NA	ID
Ethylbenzene	<1	<1	<1	<1	<1	170,000 (I) S	110,000 (I)	74 (I) E	320	18	18 (I)
Furan	NA	NA	<5	<5	NA	--	--	--	--	--	--
Isopropylbenzene	NA	NA	<1	<1	NA	56,000 S	56,000 S	800	ID	ID	ID
Methyl iodide	NA	NA	<5	<5	NA	--	--	--	--	--	--
Methyl(tert)butyl ether	NA	NA	<50	<50	NA	610,000	47,000,000 S	40 E	13,000	730	730 X
Methylene chloride	<1	<1	<1	<1	<1	220,000	220,000	5 A	17,000	1,500	940 X
n-Propylbenzene	NA	NA	<1	<1	NA	15,000 (I)	(I) ID	80 (I)	ID	ID	(I) ID
Propionitrile	NA	NA	NA	NA	NA	--	--	--	--	--	--
Styrene	<1	<1	<1	<1	<1	9,700	170,000	100 A	2,900	160	80
Tetrachloroethene	<1	<1	<1	<1	<1	12,000	25,000	5 A	2,900	190	45 X
Tetrahydrofuran	NA	NA	<5	R	NA	1,600,000	6,900,000	95	150,000	11,000	11,000 X
Toluene	<1	<1	<1	<1	<1	530,000 (I) S	530,000 (I) S	790 (I) E	26,000	270	140 (I)
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	220,000	85,000	100 A	28,000	1,500	1,500
Trichloroethene	<1	<1	<1	<1	<1	22,000	15,000	5 A	3,500	200	200 X
Vinyl chloride	<1	<1	<1	<1	<1	1,000	1,100	2 A	17,000	930	15
Xylene, o	NA	NA	<1	<1	NA	--	--	--	--	--	--
Xylenes (total)	<1	<1	<3	<3	<1	190,000 (I) S	190,000 (I) S	280 (I) E	730	41	35 (I)
Xylenes, m+p	NA	NA	<2	<2	NA	--	--	--	--	--	--

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Table 4-9. Summary of VOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Results in micrograms per liter (µg/L).

<	Less than detection limit.
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
(1)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
–	Not applicable.
*	LCS or LCSD exceeds the control limit.
*F65	Elevated detection limits were reported due to sample matrix interference which required sample or extract dilution.
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 451, Part 4, Rule 57, December 11, 2006).
B	Constituent was also detected in laboratory blank.
D	Result was obtained from analysis of a dilution.
E	Analyte was detected at a concentration greater than the calibration range, and is therefore estimated.
ft bls	Feet below land surface.
J	Estimated result.
K	Reported concentration is proportional to dilution factor and may be exaggerated.
NA	Not analyzed.
R	Rejected result.
VOCs	Volatile Organic Compounds.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

A	State of Michigan Drinking Water Standard.
D	Calculated criterion exceeds 100%, therefore it is reduced to 100%.
E	Criterion is the aesthetic drinking water value.
I	Chemical may exhibit the characteristic of ignitability, as defined in 40 CFR 261.21.
ID	Insufficient data.
R	Hazardous substance may exhibit the characteristic of reactivity as defined in 40 CFR 261.23.
S	Criterion defaults to the chemical-specific water solubility limit.
W	Concentrations of trihalomethanes in groundwater must be added together to detemine compliance with State of Michigan Criteria.
X	The GSI criterion shown is not protective for surface water that is used as a drinking water source.

Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	BR-2	BR-3	BR-5A	BR-5B		BR-6	CW-1		
Top of Screen Depth (ft bls)	75	122	88	188	188	149	130	130	130
Sample Date	06/29/97	06/28/97	07/01/97	07/01/97	07/01/97	06/29/97	10/14/97	10/22/98	04/29/99
Sample ID	GWBR-2	GWBR-3	GWBR-5A	GWBR-5B	GWGM-98	GWBR-6	CW-1	GWCW-1	GWCW-1
2,3-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10
2,4-Dimethylphenol	<5	3.4 J	R	<5	<5	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<20
2,6-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylphenol	<5	2.6 J	R	<5	<5	<5	<5	<5	<5
2-Nitrophenol	<5	<5	R	<5	<5	<5	<5	<20	<20
3,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<10
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<5	4.8 J	R	<5	<5	<5	<5	<5	<5
Anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzo(a)anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzo(a)pyrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzo(b)fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Benzo(k)fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	2.0 J	4.3 J	1.5 J	15	21	7.3	<5	<5	<5
Butylbenzylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Carbazole	<10	<10	<10	<10	<10	<10	<10	<5	<5 J
Chrysene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Diethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Dimethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Di-n-butylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Di-n-octylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hexachlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<5	<5	<5	<5	<5	<5	<5	<10	<10
Phenanthrene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Phenol	<5	<5	R	<5	<5	<5	<5	<5	<5
Pyrene	<5	<5	<5	<5	<5	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-1					GM-2A		GM-2B	
Top of Screen Depth (ft bls)	220	220	220	220	220	40	40	271	271
Sample Date	06/24/97	10/09/97	10/07/98	04/16/99	04/28/04	07/02/97	10/12/97	06/26/97	10/21/97
Sample ID	GWGM-1	GM-1	GWGM-1	GWGM-1	GWGM-1 (4/28/04)	GWGM-2A	GM-2A	GWGM-2B	GM-2B
2,3-Dimethylphenol	NA	NA	NA	<100	48 J	NA	NA	NA	NA
2,4-Dimethylphenol	**710**	**790**	**950**	**940**	NA	<5	<5	**1,800**	***3,200***
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	**890**	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	<200	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	360	220	NA	NA	NA	NA
2-Methylnaphthalene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
2-Methylphenol	53 J	**84 J**	<50	<50	<50	<5	<5	***1,900***	***3,200***
2-Nitrophenol	<100	<100	<100	<100	<50	<5	<5	<1,000	<2,000
3,4-Dimethylphenol	NA	NA	NA	<100	39 J	NA	NA	NA	NA
3-Methylphenol	NA	NA	<100	<100	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	<50	NA	NA	NA	NA
4-Methylphenol	**29 J**	22 J	<50	<50	NA	<5	<5	***13,000***	***22,000***
Anthracene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Benzo(a)anthracene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Benzo(a)pyrene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Benzo(b)fluoranthene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Benzo(g,h,i)perylene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Benzo(k)fluoranthene	<100	<100	<50	<50 J	<50	<5	<5	<1,000	<2,000
bis(2-Ethylhexyl)phthalate	<100	<100	<50	<50 J	<50	200 D	<5	<1,000	<2,000
Butylbenzylphthalate	<100	<100	<50	<50 J	<50	<5	<5	<1,000	<2,000
Carbazole	<200	<200	<50	<50 J	<50	<10	<10	<1,000	<2,000
Chrysene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Dibenzo(a,h)anthracene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Diethylphthalate	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Dimethylphthalate	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Di-n-butylphthalate	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Di-n-octylphthalate	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Fluoranthene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Hexachlorobenzene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Indeno(1,2,3-c,d)pyrene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Naphthalene	<100	<100	<100	<100	<50	<5	<5	<1,000	<2,000
Phenanthrene	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Phenol	<100	<100	<50	<50	<50	<5	<5	<1,000	<2,000
Pyrene	<100	<100	<50	<50	<50	<5	<5	**1,100**	**1,700 J**
								<1,000	<2,000

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-2B (continued)				GM-2C			GM-3A
Top of Screen Depth (ft bls)	271	271	271	271	64	64	64	74
Sample Date	12/11/97	11/22/98	04/16/99	05/25/04	11/06/98	04/13/99	05/04/04	06/25/97
Sample ID	GM-2B	GWGM-2B	GWGM-2B	GWGM-2B(5/25/04)	GWGM-2C	GWGM-2C	GWGM-2C (5/4/04)	GWGM-3A
2,3-Dimethylphenol	NA	NA	<500	<1,000	NA	<10	<10	NA
2,4-Dimethylphenol	2,400	3,000	2,600	NA	<5	<5	NA	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	2,200	NA	NA	<10	NA
2,5-Dimethylphenol	NA	NA	<1,000	NA	NA	<20	NA	NA
2,6-Dimethylphenol	NA	NA	680	<1,000	NA	<10	<10	NA
2-Methylnaphthalene	<1,200	<500	<250	<500	<5	<5	<5.0	<5
2-Methylphenol	2,500	2,500	2,100	1,500	<5	<5	<5.0	<5
2-Nitrophenol	<1,200	<1,000	<500	<500	<20	<20	<5.0	<5
3,4-Dimethylphenol	NA	NA	790	540 J	NA	<10	<10	NA
3-Methylphenol	NA	7,900	6,600	NA	<10	<10	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	8,900	NA	NA	<5.0	NA
4-Methylphenol	16,000	7,900	6,600	NA	<5	<5	NA	<5
Anthracene	<1,200	<500	<250	98 (I) J	<5	<5	<5.0	<5
Benzo(a)anthracene	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Benzo(a)pyrene	<1,200	<500	<250	120 J	<5	<5	<5.0	<5
Benzo(b)fluoranthene	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Benzo(g,h,i)perylene	<1,200	<500	<250	410 J	<5	<5 J	<5.0	<5
Benzo(k)fluoranthene	<1,200	<500	<250 J	<500	<5	<5 J	<5.0	<5
bis(2-Ethylhexyl)phthalate	<1,200	<500	<250	<500	<5	<5	<5.0	3.3 J
Butylbenzylphthalate	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Carbazole	<1,200	<500	<250 J	110 J	<5	<5 J	<5.0	<10
Chrysene	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Dibenzo(a,h)anthracene	<1,200	<500	<250	360 J	<5	<5	<5.0	<5
Diethylphthalate	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Dimethylphthalate	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Di-n-butylphthalate	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Di-n-octylphthalate	<1,200	<500	<250	<500	<5	<5	<5.0	<5
Fluoranthene	<1,200	<500	<250	130 J	<5	<5	<5.0	<5
Hexachlorobenzene	<1,200	<500	<250	81 J	<5	<5	<5.0	<5
Indeno(1,2,3-c,d)pyrene	<1,200	<500	<250	330 J	<5	<5	<5.0	<5
Naphthalene	<1,200	<1,000	<500	<500	<10	<10	<5.0	<5
Phenanthrene	<1,200	<500	<250	100 J	<5	<5	<5.0	<5
Phenol	1,500	1,000	940	560	<5	<5	<5.0	<5
Pyrene	<1,200	<500	<250	110 J	<5	<5	<5.0	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3A (continued)				GM-3B				
Top of Screen Depth (ft bls)	74	74	74	74	170	170	170	170	170
Sample Date	10/10/97	10/09/98	04/13/99	05/05/04	06/26/97	10/14/97	10/08/98	04/17/99	04/17/99
Sample ID	GM-3A	GWGM-3A	GWGM-3A	GWGM-3A (5/5/04)	GWGM-3B	GM-3B	GWGM-3B	GWGM-3B	GWGM-88
2,3-Dimethylphenol	NA	NA	<10	<10	NA	NA	NA	<50	<50
2,4-Dimethylphenol	<5	<5	<5	NA	310	100	350	280	190
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	<10	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	<20	NA	NA	NA	NA	<100	100
2,6-Dimethylphenol	NA	NA	<10	<10	NA	NA	NA	100	100
2-Methylnaphthalene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
2-Methylphenol	<5	<5	<5	<5.0	**580**	**220**	**690**	**460**	**470**
2-Nitrophenol	<5	<20	<20	<5.0	<67	<20	<50	<50	<50
3,4-Dimethylphenol	NA	NA	<10	<10	NA	NA	NA	62	65
3-Methylphenol	NA	<10	<10	NA	NA	NA	**110**	<50	<50
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	<5.0	NA	NA	NA	NA	NA
4-Methylphenol	<5	<5	<5	NA	**320**	**140**	**110**	<25	<25
Anthracene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Benzo(a)anthracene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Benzo(a)pyrene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Benzo(b)fluoranthene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Benzo(g,h,i)perylene	<5	<5	<5 J	<5.0	<67	<20	<25	<25	<25
Benzo(k)fluoranthene	<5	<5	<5 J	<5.0	<67	<20	<25	<25 J	<25 J
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5.0	29 J	23	<25	<25	<25
Butylbenzylphthalate	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Carbazole	<10	<5	<5 J	<5.0	<130	<40	<25	<25 J	<25 J
Chrysene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Dibenzo(a,h)anthracene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Diethylphthalate	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Dimethylphthalate	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Di-n-butylphthalate	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Di-n-octylphthalate	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Fluoranthene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Hexachlorobenzene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Naphthalene	<5	<10	<10	<5.0	<67	<20	<50	<50	<50
Phenanthrene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Phenol	<5	<5	<5	<5.0	<67	<20	<25	<25	<25
Pyrene	<5	<5	<5	<5.0	<67	<20	<25	<25	<25

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-3B (continued)		GM-4				GM-5		
Top of Screen Depth (ft bls)	170	170	76	76	76	76	250	250	250
Sample Date	05/11/04	05/11/04	06/26/97	10/14/97	10/20/98	04/21/99	07/02/97	10/15/97	04/18/99
Sample ID	GWGM-3B (5/11/04)	GWGM-3B (5/11/04)-DL	GWGM-4	GM-4	GWGM-4	GWGM-4	GWGM-5	GM-5	GWGM-5
2,3-Dimethylphenol	42	19 DJ	NA	NA	NA	<10	NA	NA	100
2,4-Dimethylphenol	NA	NA	<5	<5	<5	<5	1,100	910	870
2,4-Dimethylphenol/2,5-Dimethylphenol	620 E	330 D	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	<20	NA	NA	<200
2,6-Dimethylphenol	140	64 D	NA	NA	NA	<10	NA	NA	460
2-Methylnaphthalene	<10	<20	<5	<5	<5	<5	<100	<100	<50
2-Methylphenol	320	160 D	<5	<5	<5	<5	<100	<100	<50
2-Nitrophenol	<10	<20	<5	<5	<20	<20	<100	<100	<100
3,4-Dimethylphenol	<20	<40	NA	NA	NA	<10	NA	NA	<100
3-Methylphenol	NA	NA	NA	NA	<10	<10	NA	NA	<100
3-Methylphenol/4-Methylphenol(m&p-cresol)	<10	<20	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	NA	<5	<5	<5	<5	<100	<100	<50
Anthracene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Benzo(a)anthracene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Benzo(a)pyrene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Benzo(b)fluoranthene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Benzo(g,h,i)perylene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Benzo(k)fluoranthene	<10	<20	<5	<5	<5	<5 J	<100	<100	<50 J
bis(2-Ethylhexyl)phthalate	<10	<20	6.9	<5	<5	<5 J	<100	<100	<50
Butylbenzylphthalate	<10	<20	<5	<5	<5	<5 J	<100	<100	<50
Carbazole	<10	<20	<10	<10	<5	<5 J	<200	<200	<50 J
Chrysene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Dibenzo(a,h)anthracene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Diethylphthalate	<10	<20	<5	<5	<5	<5	<100	<100	<50
Dimethylphthalate	<10	<20	<5	<5	<5	<5	<100	<100	<50
Di-n-butylphthalate	<10	<20	<5	<5	<5	<5	<100	<100	<50
Di-n-octylphthalate	<10	<20	<5	<5	<5	<5	<100	<100	<50
Fluoranthene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Hexachlorobenzene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Indeno(1,2,3-c,d)pyrene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Naphthalene	<10	<20	<5	<5	<10	<10	<100	<100	<100
Phenanthrene	<10	<20	<5	<5	<5	<5	<100	<100	<50
Phenol	<10	<20	<5	<5	<5	<5	<100	<100	<50
Pyrene	<10	<20	<5	<5	<5	<5	<100	<100	<50

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-5			GM-6						
Top of Screen Depth (ft bls)	250	250	250	165	165	165	165	165	165	165
Sample Date	11/30/99	08/15/00	09/20/00	06/28/97	10/22/97	10/10/98	04/19/99	02/29/00	07/19/00	09/25/00
Sample ID	GM-5	GWGM-5	GWGM-5	GWGM-6	GM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6	GWGM-6
2,3-Dimethylphenol	NA	NA	NA	NA	NA	NA	28	NA	NA	NA
2,4-Dimethylphenol	900	1,000	1,100	240	250	220	270	210	260	200
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	<50	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	NA	NA	NA	200	NA	NA	NA
2-Methylnaphthalene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
2-Methylphenol	<20	<25	<25	<20	<25	<10	<12	<5	<5.0	<5.0
2-Nitrophenol	<20	NA	NA	<20	<25	<20	<25	NA	<5.0	NA
3,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	<25	NA	NA	NA
3-Methylphenol	NA	NA	NA	NA	NA	<20	<25	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<20	<25	<25	NA	NA	NA	NA	<5	<5.0	<5.0
4-Methylphenol	NA	NA	NA	<20	<25	<10	<12	NA	NA	NA
Anthracene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Benzo(a)anthracene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Benzo(a)pyrene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Benzo(b)fluoranthene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Benzo(g,h,i)perylene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Benzo(k)fluoranthene	<20	NA	NA	<20	<25	<10	<12 J	NA	<5.0	NA
bis(2-Ethylhexyl)phthalate	<20	NA	NA	15 J	6.7 J	10	54 J	NA	38 J	NA
Butylbenzylphthalate	<20	NA	NA	<20	<25	<10	<12 J	NA	<5.0	NA
Carbazole	<20	NA	NA	<40	<50	<10	<12 J	NA	<5.0	NA
Chrysene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Dibenzo(a,h)anthracene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Diethylphthalate	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Dimethylphthalate	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Di-n-butylphthalate	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Di-n-octylphthalate	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Fluoranthene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Hexachlorobenzene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Indeno(1,2,3-c,d)pyrene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Naphthalene	<20	NA	NA	<20	<25	<20	<25	NA	<5.0	NA
Phenanthrene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA
Phenol	<20	<25	<25	<20	<25	<10	<12	<5	<5.0	<5.0
Pyrene	<20	NA	NA	<20	<25	<10	<12	NA	<5.0	NA

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-7						GM-8			
Top of Screen Depth (ft bls)	145	145	145	145	145	145	79	79	79	79
Sample Date	06/29/97	10/11/97	10/23/98	05/01/99	09/23/03	05/03/04	06/30/97	10/12/97	10/09/98	04/13/99
Sample ID	GWGM-7	GM-7	GWGM-7	GWGM-7	GM-7	GWGM-7 (5/3/04)	GWGM-8	GM-8	GWGM-8	GWGM-8
2,3-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	NA	<10
2,4-Dimethylphenol	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	<10	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	<20	NA	NA	NA	NA	NA	<20
2,6-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	NA	<10
2-Methylnaphthalene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
2-Methylphenol	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
2-Nitrophenol	<5	<5	<20	<20	<5.0	<5.0	<5	<5	<20	<20
3,4-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	NA	<10
3-Methylphenol	NA	NA	<10	<10	NA	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	<5.0	<5.0	NA	NA	NA	NA
4-Methylphenol	<5	<5	<5	<5	NA	NA	<5	<5	<5	<5
Anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(b)fluoranthene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5 J
Benzo(k)fluoranthene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5 J
bis(2-Ethylhexyl)phthalate	7.9	<5	10	<5	<5.0	<5.0	1.9 J	<5	<5	<5
Butylbenzylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Carbazole	<10	<10	<5	<5	<5.0	<5.0	<10	<10	<5	<5 J
Chrysene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Diethylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Dimethylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Di-n-butylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Di-n-octylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Fluoranthene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Hexachlorobenzene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Naphthalene	<5	<5	<10	<10	<5.0	<5.0	<5	<5	<10	<10
Phenanthrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Phenol	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5
Pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-8 (continued)	GM-9						GM-10
Top of Screen Depth (ft bls)	79	164	164	164	164	164	164	170
Sample Date	10/21/99	10/13/97	10/11/98	04/18/99	09/10/03	05/03/04	07/28/05	10/14/97
Sample ID	GM-8	GM-9	GWGM-9	GWGM-9	GM-9	GWGM-9 (5/3/04)	GWGM-9 (072805)	GM-10
2,3-Dimethylphenol	NA	NA	NA	<10	<10	<10	<9.8	NA
2,4-Dimethylphenol	<5.0	<5	<5	<5	NA	NA	<4.9	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	<10	<9.8	NA
2,5-Dimethylphenol	NA	NA	NA	<20	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	<10	<10	<10	<9.8	NA
2-Methylnaphthalene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
2-Methylphenol	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
2-Nitrophenol	<5.0	<5	<20	<20	<5.0	<5.0	1.8 J	<5
3,4-Dimethylphenol	NA	NA	NA	<10	<10	<10	<9.8	NA
3-Methylphenol	NA	NA	<10	<10	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	NA	NA	NA	<5.0	<5.0	<4.9	NA
4-Methylphenol	NA	<5	<5	<5	NA	NA	NA	<5
Anthracene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Benzo(a)anthracene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Benzo(a)pyrene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Benzo(b)fluoranthene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Benzo(g,h,i)perylene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Benzo(k)fluoranthene	<5.0	<5	<5	<5 J	<5.0	<5.0	<4.9	<5
bis(2-Ethylhexyl)phthalate	<5.0	5.2	<5	<5	<5.0	<5.0	<4.9	<5
Butylbenzylphthalate	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Carbazole	<5.0	<10	<5	<5 J	<5.0	<5.0	<4.9	<10
Chrysene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Dibenzo(a,h)anthracene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Diethylphthalate	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Dimethylphthalate	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Di-n-butylphthalate	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Di-n-octylphthalate	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Fluoranthene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Hexachlorobenzene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Indeno(1,2,3-c,d)pyrene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Naphthalene	<5.0	<5	<10	<10	<5.0	<5.0	<4.9	<5
Phenanthrene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Phenol	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5
Pyrene	<5.0	<5	<5	<5	<5.0	<5.0	<4.9	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-10 (continued)		GM-11	GM-12			GM-13		
Top of Screen Depth (ft bls)	170	170	174.7	290	290	290	325	325	325
Sample Date	11/06/98	04/27/99	10/15/97	10/22/97	10/10/98	04/19/99	10/22/97	04/20/99	05/18/04
Sample ID	GWGM-10	GWGM-10	GM-11	GM-12	GWGM-12	GWGM-12	GM-13	GWGM-13	GWGM-13 (5/18/04)
2,3-Dimethylphenol	NA	<10	NA	NA	NA	<10	NA	<10	14
2,4-Dimethylphenol	<5	<5	<5	<5	<5	<5	18	39	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	20
2,5-Dimethylphenol	NA	<20	NA	NA	NA	<20	NA	<20	NA
2,6-Dimethylphenol	NA	<10	NA	NA	NA	<10	NA	32	9.9 J
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
2-Methylphenol	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
2-Nitrophenol	<20	<20	<5	<5	<20	<20	<5	<20	<5.0
3,4-Dimethylphenol	NA	<10	NA	NA	NA	<10	NA	<10	<10
3-Methylphenol	<10	<10	NA	NA	<10	<10	NA	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	NA	9.6
4-Methylphenol	<5	<5	<5	<5	<5	<5	<5	<5	NA
Anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Benzo(a)anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Benzo(a)pyrene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Benzo(b)fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Benzo(k)fluoranthene	<5	<5	<5	<5	<5	<5 J	<5	<5 J	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5	<5	5.3	<5	<5	2.0 J	<5 J	<5.0
Butylbenzylphthalate	<5	<5	<5	<5	<5	<5	<5	<5 J	<5.0
Carbazole	<5	<5	<10	<10	<5	<5 J	<10	<5 J	<5.0
Chrysene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Diethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Dimethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Di-n-butylphthalate	<5	<5	<5	<5	<5	<5	<5	6.2	<5.0
Di-n-octylphthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Hexachlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5 J	<5	<5	<5	<5	<5	<5	<5.0
Naphthalene	<10	<10	<5	<5	<10	<10	<5	<10	<5.0
Phenanthrene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Phenol	<5	<5	<5	<5	<5	<5	<5	<5	<5.0
Pyrene	<5	<5	<5	<5	<5	<5	<5	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-14			GM-15				
Top of Screen Depth (ft bls)	135	135	135	165	165	165	165	165
Sample Date	10/21/97	10/28/98	05/02/99	10/20/97	10/11/98	04/20/99	05/10/04	05/10/04
Sample ID	GM-14	GWGM-14	GWGM-14	GM-15	GWGM-15	GWGM-15	GWGM-15 (5/10/04)	GWGM-996 (5/10/04)
2,3-Dimethylphenol	NA	NA	<10	NA	NA	<10	<10	<10
2,4-Dimethylphenol	1.3 J	<5	<5	<5	<5	<5	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	<10	<10
2,5-Dimethylphenol	NA	NA	<20	NA	NA	<20	NA	NA
2,6-Dimethylphenol	NA	NA	<10	NA	NA	<10	<10	<10
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
2-Methylphenol	<5	<5	<5	<5	<5	<5	<5.0	<5.0
2-Nitrophenol	<5	<20	<20	<5	<20	<20	<5.0	<5.0
3,4-Dimethylphenol	NA	NA	<10	NA	NA	<10	<10	<10
3-Methylphenol	NA	<10	<10	NA	<10	<10	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	<5.0	<5.0
4-Methylphenol	<5	<5	<5	<5	<5	<5	NA	NA
Anthracene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(a)anthracene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(a)pyrene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(b)fluoranthene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(k)fluoranthene	<5	<5	<5	<5	<5	<5 J	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5	<5	6	<5	7.1 J	<5.0	<5.0
Butylbenzylphthalate	<5	<5	<5	<5	<5	<5 J	<5.0	<5.0
Carbazole	<10	<5	<5	<10	<5	<5 J	<5.0	<5.0
Chrysene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Diethylphthalate	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Dimethylphthalate	<5	<5	<5	1.9 J	<5	<5	<5.0	<5.0
Di-n-butylphthalate	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Di-n-octylphthalate	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Fluoranthene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Hexachlorobenzene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Naphthalene	<5	<10	<10	<5	<10	<10	<5.0	<5.0
Phenanthrene	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Phenol	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Pyrene	<5	<5	<5	<5	<5	<5	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-16						GM-17		
Top of Screen Depth (ft bls)	108	108	108	108	108	108	224.3	224.3	224.3
Sample Date	10/22/97	10/22/97	10/09/98	04/14/99	09/23/03	04/27/04	10/28/97	10/12/98	04/26/99
Sample ID	GM-16	GM-78	GWGM-16	GWGM-16	GM-16	GWGM-16 (4/27/04)	GM-17	GWGM-17	GWGM-17
2,3-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	<10
2,4-Dimethylphenol	<5	<5	<5	<5	NA	NA	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	<10	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	<20	NA	NA	NA	NA	<20
2,6-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	<10
2-Methylnaphthalene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
2-Methylphenol	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
2-Nitrophenol	<5	<5	<20	<20	<5.0	<5.0	<5	<20	<20
3,4-Dimethylphenol	NA	NA	NA	<10	<10	<10	NA	NA	<10
3-Methylphenol	NA	NA	<10	<10	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	<5.0	<5.0	NA	NA	NA
4-Methylphenol	<5	<5	<5	<5	NA	NA	<5	<5	<5
Anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Benzo(a)anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Benzo(a)pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Benzo(b)fluoranthene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5	<5	<5 J	<5.0	<5.0	<5	<5	<5
Benzo(k)fluoranthene	<5	<5	<5	<5 J	<5.0	<5.0	<5	<5	<5
bis(2-Ethylhexyl)phthalate	9.5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Butylbenzylphthalate	<5	<5	<5	<5	<5.0	<5.0	1.3 J	<5	<5
Carbazole	<10	<10	<5	<5 J	<5.0	<5.0	<10	<5	<5 J
Chrysene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Diethylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Dimethylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Di-n-butylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Di-n-octylphthalate	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Fluoranthene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Hexachlorobenzene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Naphthalene	<5	<5	<10	<10	<5.0	<5.0	<5	<10	<10
Phenanthrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Phenol	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5
Pyrene	<5	<5	<5	<5	<5.0	<5.0	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-18		GM-19	GM-20	GM-21				
Top of Screen Depth (ft bls)	50	50	46	42	5	5	5	5	5
Sample Date	12/04/97	11/07/98	12/11/97	12/05/97	12/03/97	12/03/97	10/13/98	01/29/01	09/09/05
Sample ID	GM-18	GWGM-18	GM-19	GM-20	GM-21	GM-95	GWGM-21	GWGM-21	GWGM-21 (9/9/05)
2,3-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<9.9
2,4-Dimethylphenol	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<9.9
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<9.9
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
2-Methylphenol	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
2-Nitrophenol	<5	<20	<5	<5	<5	<5	<20	<5.0	<5.0
3,4-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	<9.9
3-Methylphenol	NA	<10	NA	NA	NA	NA	<10	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	<5.0	<5.0
4-Methylphenol	<5	<5	<5	<5	<5	<5	<5	NA	NA
Anthracene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(a)anthracene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(a)pyrene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(b)fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Benzo(k)fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Butylbenzylphthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Carbazole	<10	<5	<10	<10	<10	<10	<5	<5.0	<5.0
Chrysene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Diethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Dimethylphthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Di-n-butylphthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Di-n-octylphthalate	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Fluoranthene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Hexachlorobenzene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Naphthalene	<5	<10	<5	<5	<5	<5	<10	<5.0	<5.0
Phenanthrene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Phenol	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0
Pyrene	<5	<5	<5	<5	<5	<5	<5	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-22						GM-23
Top of Screen Depth (ft bls)	6	6	6	6	6	6	3.5
Sample Date	12/05/97	10/10/98	04/13/99	01/15/01	09/08/05	09/08/05	12/03/97
Sample ID	GM-22	GWGM-22	GWGM-22	GWGM-22-RE	GWGM-22(9/8/05)	GWGM-999 (GM-22) (9/8/05)	GM-23
2,3-Dimethylphenol	NA	NA	<10	NA	<9.3	<9.3	NA
2,4-Dimethylphenol	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<9.3	<9.3	NA
2,5-Dimethylphenol	NA	NA	<20	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	<10	NA	<9.3	<9.3	NA
2-Methylnaphthalene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
2-Methylphenol	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
2-Nitrophenol	<5	<20	<20	<5.0 J	<4.7	<4.7	<5
3,4-Dimethylphenol	NA	NA	<10	NA	<9.3	<9.3	NA
3-Methylphenol	NA	<10	<10	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	<5.0 J	<4.7	<4.7	NA
4-Methylphenol	<5	<5	<5	NA	NA	NA	<5
Anthracene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Benzo(a)anthracene	<5	<5	<5	0.58 J	<4.7	<4.7	<5
Benzo(a)pyrene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Benzo(b)fluoranthene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Benzo(g,h,i)perylene	<5	<5	<5 J	<5.0 J	<4.7	<4.7	<5
Benzo(k)fluoranthene	<5	<5	<5 J	<5.0 J	<4.7	<4.7	<5
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Butylbenzylphthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Carbazole	<10	<5	<5 J	<5.0 J	<4.7	<4.7	<10
Chrysene	<5	<5	<5	0.52 J	<4.7	<4.7	<5
Dibenzo(a,h)anthracene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Diethylphthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Dimethylphthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Di-n-butylphthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Di-n-octylphthalate	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Fluoranthene	<5	<5	<5	1.0 J	<4.7	<4.7	<5
Hexachlorobenzene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Naphthalene	<5	<10	<10	<5.0 J	<4.7	<4.7	<5
Phenanthrene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Phenol	<5	<5	<5	<5.0 J	<4.7	<4.7	<5
Pyrene	<5	<5	<5	<5.0 J	<4.7	<4.7	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-23 (continued)					GM-24A	
Top of Screen Depth (ft bls)	3.5	3.5	3.5	3.5	3.5	71	71
Sample Date	10/10/98	01/16/01	05/12/04	05/12/04	09/08/05	11/09/98	05/04/99
Sample ID	GWGM-23	GWGM-23-RE	GWGM-23 (5/12/04)	GWGM-995 (5/12/04)	GWGM-23(9/8/05)	GWGM-24A	GWGM-24A
2,3-Dimethylphenol	NA	NA	<10	<10	<9.3	NA	<10
2,4-Dimethylphenol	<5	<5.0 J	NA	NA	<4.7	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	<10	<10	<9.3	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	<20
2,6-Dimethylphenol	NA	NA	<10	<10	<9.3	NA	<10
2-Methylnaphthalene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
2-Methylphenol	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
2-Nitrophenol	<20	<5.0 J	<5.0	<5.0	<4.7	<20	<20
3,4-Dimethylphenol	NA	NA	<10	<10	<9.3	NA	<10
3-Methylphenol	<10	NA	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	<5.0 J	<5.0	<5.0	<4.7	NA	NA
4-Methylphenol	<5	NA	NA	NA	NA	<5	<5
Anthracene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Benzo(a)anthracene	<5	0.57 J	<5.0	<5.0	<4.7	<5	<5
Benzo(a)pyrene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Benzo(b)fluoranthene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Benzo(g,h,i)perylene	<5	1.4 J	<5.0	<5.0	<4.7	<5	<5
Benzo(k)fluoranthene	<5	0.53 J	<5.0	<5.0	<4.7	<5	<5
bis(2-Ethylhexyl)phthalate	<5	4.3 J	<5.0	<5.0	1.6 J	<5	<5
Butylbenzylphthalate	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Carbazole	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Chrysene	<5	0.50 J	<5.0	<5.0	<4.7	<5	<5
Dibenzo(a,h)anthracene	<5	1.4 J	<5.0	<5.0	<4.7	<5	<5
Diethylphthalate	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Dimethylphthalate	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Di-n-butylphthalate	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Di-n-octylphthalate	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Fluoranthene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Hexachlorobenzene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	1.4 J	<5.0	<5.0	<4.7	<5	<5 J
Naphthalene	<10	<5.0 J	<5.0	<5.0	<4.7	<10	<10
Phenanthrene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Phenol	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5
Pyrene	<5	<5.0 J	<5.0	<5.0	<4.7	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24B				GM-24C			
Top of Screen Depth (ft bls)	104	104	104	104	193	193	193	193
Sample Date	11/17/98	11/17/98	05/05/99	04/29/04	11/20/98	11/20/98	05/13/99	09/24/03
Sample ID	GWGM-24B	GWGM-94	GWGM-24B	GWGM-24B (4/29/04)	GWGM-24C	GWGM-93	GWGM-24C	GM-24C
2,3-Dimethylphenol	NA	NA	<10	<10	NA	NA	<10	<10
2,4-Dimethylphenol	<5	<5	<5	NA	<5	<5	<5	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	<10	NA	NA	NA	<10
2,5-Dimethylphenol	NA	NA	<20	NA	NA	NA	<20	NA
2,6-Dimethylphenol	NA	NA	<10	<10	NA	NA	<10	<10
2-Methylnaphthalene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
2-Methylphenol	<5	<5	<5	<5.0	<5	<5	<5	<5.0
2-Nitrophenol	<20	<20	<20	<5.0	<20	<20	<20	<5.0
3,4-Dimethylphenol	NA	NA	<10	<10	NA	NA	<10	<10
3-Methylphenol	<10	<10	<10	NA	<10	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	<5.0	NA	NA	NA	<5.0
4-Methylphenol	<5	<5	<5	NA	<5	<5	<5	NA
Anthracene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Benzo(a)anthracene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Benzo(a)pyrene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Benzo(b)fluoranthene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Benzo(g,h,i)perylene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Benzo(k)fluoranthene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5.0	12	9.3	11	<5.0
Butylbenzylphthalate	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Carbazole	<5	<5	<5 J	<5.0	<5	<5	<5 J	<5.0
Chrysene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Diethylphthalate	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Dimethylphthalate	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Di-n-butylphthalate	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Di-n-octylphthalate	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Fluoranthene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Hexachlorobenzene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Naphthalene	<10	<10	<10	<5.0	<10	<10	<10	<5.0
Phenanthrene	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Phenol	<5	<5	<5	<5.0	<5	<5	<5	<5.0
Pyrene	<5	<5	<5	<5.0	<5	<5	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-24C (continued)	GM-25A					
Top of Screen Depth (ft bls)	193	19	19	19	19	19	19
Sample Date	04/29/04	10/06/98	04/16/99	12/01/99	08/21/00	09/09/03	05/12/04
Sample ID	GWGM-24C (4/29/04)	GWGM-25A	GWGM-25A	GM-25A	GWGM-25A	GM-25A	GWGM-25A (5/12/04)
2,3-Dimethylphenol	<10	NA	140	NA	NA	<50	28 J
2,4-Dimethylphenol	NA	1,300	1,100	900	1,300	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	NA	NA	NA	NA	790	<40
2,5-Dimethylphenol	NA	NA	<200	NA	NA	NA	NA
2,6-Dimethylphenol	<10	NA	550	NA	NA	350	100
2-Methylnaphthalene	<5.0	<50	<50	<20	NA	<25	<20
2-Methylphenol	<5.0	<50	<50	<20	<25	<25	<20
2-Nitrophenol	<5.0	<100	<100	<20	NA	<25	<20
3,4-Dimethylphenol	<10	NA	<100	NA	NA	78	<40
3-Methylphenol	NA	<100	<100	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	NA	NA	<20	<25	<25	<20
4-Methylphenol	NA	<50	<50	NA	NA	NA	NA
Anthracene	<5.0	<50	<50	<20	NA	<25	<20
Benzo(a)anthracene	<5.0	<50	<50	<20	NA	<25	<20
Benzo(a)pyrene	<5.0	<50	<50	<20	NA	<25	<20
Benzo(b)fluoranthene	<5.0	<50	<50	<20	NA	<25	<20
Benzo(g,h,i)perylene	<5.0	<50	<50	<20	NA	<25	<20
Benzo(k)fluoranthene	<5.0	<50	<50 J	<20	NA	<25	<20
bis(2-Ethylhexyl)phthalate	<5.0	<50	<50 J	<20	NA	<25	<20
Butylbenzylphthalate	<5.0	<50	<50 J	<20	NA	<25	<20
Carbazole	<5.0	<50	<50 J	<20	NA	<25	<20
Chrysene	<5.0	<50	<50	<20	NA	<25	<20
Dibenzo(a,h)anthracene	<5.0	<50	<50	<20	NA	<25	<20
Diethylphthalate	<5.0	<50	<50	<20	NA	<25	<20
Dimethylphthalate	<5.0	<50	<50	<20	NA	<25	<20
Di-n-butylphthalate	<5.0	<50	<50	<20	NA	<25	<20
Di-n-octylphthalate	<5.0	<50	<50	<20	NA	<25	<20
Fluoranthene	<5.0	<50	<50	<20	NA	<25	<20
Hexachlorobenzene	<5.0	<50	<50	<20	NA	<25	<20
Indeno(1,2,3-c,d)pyrene	<5.0	<50	<50	<20	NA	<25	<20
Naphthalene	<5.0	<100	<100	<20	NA	<25	<20
Phenanthrene	<5.0	<50	<50	<20	NA	<25	<20
Phenol	<5.0	<50	<50	<20	<25	<25	<20
Pyrene	<5.0	<50	<50	<20	NA	<25	<20

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25B					GM-25C			
Top of Screen Depth (ft bls)	98	98	98	98	98	206	206	206	206
Sample Date	10/06/98	04/27/99	10/20/99	09/09/03	05/18/04	11/09/98	11/09/98	04/20/99	08/02/00
Sample ID	GWGM-25B	GWGM-25B	GM-25B	GM-25B	GWGM-25B (5/18/04)	GWGM-25C	GWGM-95	GWGM-25C	GWGM-25C
2,3-Dimethylphenol	NA	<1,000	NA	<1,000	<10	NA	NA	<10	NA
2,4-Dimethylphenol	***5,300***	***3,400***	***3,900***	NA	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	***3,800***	<10	NA	NA	NA	NA
2,5-Dimethylphenol	NA	<2,000	NA	NA	NA	NA	NA	<20	NA
2,6-Dimethylphenol	NA	2,000	NA	1,200	<10	NA	NA	<10	NA
2-Methylnaphthalene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
2-Methylphenol	***6,800***	***6,000***	***4,800***	***4,900***	<5.0	<5	<5	<5	<5
2-Nitrophenol	<2,000	<1,000	<200	<500	<5.0	<20	<20	<20	<5
3,4-Dimethylphenol	NA	<1,000	NA	<1,000	<10	NA	NA	<10	NA
3-Methylphenol	***14,000***	***11,000***	NA	NA	NA	<10	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	***13,000***	***16,000***	<5.0	NA	NA	NA	<5
4-Methylphenol	***14,000***	***11,000***	NA	NA	NA	<5	<5	<5	NA
Anthracene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Benzo(a)anthracene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	7.6
Benzo(a)pyrene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	7.2
Benzo(b)fluoranthene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	9.2
Benzo(g,h,i)perylene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	2.8 J
Benzo(k)fluoranthene	<1,000	<500	<200	<500	<5.0	<5	<5	<5 J	6.4
bis(2-Ethylhexyl)phthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5 J	12
Butylbenzylphthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5 J	5.1
Carbazole	<1,000	<500 J	<200	<500	<5.0	<5	<5	<5 J	<5
Chrysene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	9.3
Dibenzo(a,h)anthracene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	1.9 J
Diethylphthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Dimethylphthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Di-n-butylphthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Di-n-octylphthalate	<1,000	<500	<200	<500	<5.0	<5	<5	<5	10
Fluoranthene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	1.1 J
Hexachlorobenzene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	1.8 J
Naphthalene	<2,000	<1,000	<200	<500	<5.0	<10	<10	<10	<5
Phenanthrene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	<5
Phenol	***9,700***	***6,700***	***8,000***	***6,900***	<5.0	<5	<5	<5	<5
Pyrene	<1,000	<500	<200	<500	<5.0	<5	<5	<5	1.3 J

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-25C (continued)		GM-26A					
Top of Screen Depth (ft bls)	206	206	30	30	30	30	30	30
Sample Date	09/15/03	05/04/04	10/07/98	04/14/99	11/29/99	08/16/00	09/09/03	05/13/04
Sample ID	GM-25C	GWGM-25C (5/4/04)	GWGM-26A	GWGM-26A	GM-26A	GWGM-26A	GM-26A	GWGM-26A (5/13/04)
2,3-Dimethylphenol	94	25	NA	<200	NA	NA	<100	<100
2,4-Dimethylphenol	NA	NA	**940**	**1,600**	**850**	**1,000**	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	51	46	NA	NA	NA	NA	**1,200**	**1,200**
2,5-Dimethylphenol	NA	NA	NA	<400	NA	NA	NA	NA
2,6-Dimethylphenol	<10	<10	NA	700	NA	NA	370	270
2-Methylnaphthalene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
2-Methylphenol	48	<5.0	81	**540**	<20	<25	<50	<50
2-Nitrophenol	<5.0	<5.0	<100	<200	<20	NA	<50	<50
3,4-Dimethylphenol	<10	<10	NA	<200	NA	NA	<100	<100
3-Methylphenol	NA	NA	**210**	**650**	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	**180**	<5.0	NA	NA	**350**	<25	<50	<50
4-Methylphenol	NA	NA	**210**	***650***	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Benzo(a)anthracene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Benzo(a)pyrene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Benzo(b)fluoranthene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Benzo(g,h,i)perylene	<5.0	0.78 J	<50	<100 J	<20	NA	<50	<50
Benzo(k)fluoranthene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Butylbenzylphthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Carbazole	<5.0	<5.0	<50	<100 J	<20	NA	<50	<50
Chrysene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Dibenzo(a,h)anthracene	<5.0	0.69 J	<50	<100 J	<20	NA	<50	<50
Diethylphthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Dimethylphthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Di-n-butylphthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Di-n-octylphthalate	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Fluoranthene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Hexachlorobenzene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<50	<100 J	<20	NA	<50	<50
Naphthalene	<5.0	<5.0	<100	<200	<20	NA	<50	<50
Phenanthrene	<5.0	<5.0	<50	<100	<20	NA	<50	<50
Phenol	100	<5.0	<50	<100	<20	<25	<50	<50
Pyrene	<5.0	<5.0	<50	<100	<20	NA	<50	<50

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26B							GM-26C
Top of Screen Depth (ft bls)	101	101	101	101	101	101	101	160
Sample Date	10/07/98	04/15/99	11/30/99	07/18/00	09/09/03	04/27/04	07/28/05	10/25/98
Sample ID	GWGM-26B	GWGM-26B	GM-26B	GWGM-26B	GM-26B	GWGM-26B (4/27/04)	GWGM-26B (072805)	GWGM-26C
2,3-Dimethylphenol	NA	<10	NA	NA	<10	5.8 J	<9.7	NA
2,4-Dimethylphenol	<5	<5	<5.0	<5.0	NA	NA	<4.9	2,600
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	2.4 J	<9.7	NA
2,5-Dimethylphenol	NA	<20	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	<10	NA	NA	<10	<10	1.5 J	NA
2-Methylnaphthalene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
2-Methylphenol	<5	<5	<5.0	<5.0	<5.0	1.7 J	<4.9	<100
2-Nitrophenol	<20	<20	<5.0	<5.0	<5.0	<5.0	<4.9	<200
3,4-Dimethylphenol	NA	<10	NA	NA	<10	<10	<9.7	NA
3-Methylphenol	<10	<10	NA	NA	NA	NA	NA	<200
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	<5.0	<5.0	<5.0	5.1	<4.9	NA
4-Methylphenol	<5	<5	NA	NA	NA	NA	NA	<100
Anthracene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Benzo(a)anthracene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Benzo(a)pyrene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Benzo(b)fluoranthene	<5	<5 J	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Benzo(g,h,i)perylene	<5	<5 J	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Benzo(k)fluoranthene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
bis(2-Ethylhexyl)phthalate	<5	<5	6.6	0.86 J	<5.0	<5.0	<4.9	<100
Butylbenzylphthalate	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Carbazole	<5	<5 J	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Chrysene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Dibenzo(a,h)anthracene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Diethylphthalate	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Dimethylphthalate	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Di-n-butylphthalate	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Di-n-octylphthalate	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Fluoranthene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Hexachlorobenzene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Indeno(1,2,3-c,d)pyrene	<5	<5	<5.0	<5.0 J	<5.0	<5.0	<4.9	<100
Naphthalene	<10	<10	<5.0	<5.0	<5.0	<5.0	<4.9	<200
Phenanthrene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100
Phenol	<5	<5	<5.0	1.5 J	<5.0	<5.0	<4.9	<100
Pyrene	<5	<5	<5.0	<5.0	<5.0	<5.0	<4.9	<100

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-26C (continued)						GM-27A	
Top of Screen Depth (ft bls)	160	160	160	160	160	160	30	30
Sample Date	04/17/99	11/30/99	08/16/00	09/16/03	05/18/04	05/18/04	10/08/98	04/15/99
Sample ID	GWGM-26C	GM-26C	GWGM-26C	GM-26C	GWGM-26C (5/18/04)	GWGM-994 (5/18/04)	GWGM-27A	GWGM-27A
2,3-Dimethylphenol	<200	NA	NA	<400	260	260	NA	130
2,4-Dimethylphenol	1,600	2,200	3,000	NA	NA	NA	1,300	1,100
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	3,500	1,200	1,600	NA	NA
2,5-Dimethylphenol	640	NA	NA	NA	NA	NA	NA	<200
2,6-Dimethylphenol	620	NA	NA	770	230	260	NA	540
2-Methylnaphthalene	<100	<50	NA	<200	<50	<50	<50	<50
2-Methylphenol	<100	<50	<50	<200	<50	<50	<50	70
2-Nitrophenol	<200	<50	NA	<200	<50	<50	<100	<100
3,4-Dimethylphenol	<200	NA	NA	<400	57 J	58 J	NA	<100
3-Methylphenol	<200	NA	NA	NA	NA	NA	<100	<100
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	<50	<50	<200	<50	<50	NA	NA
4-Methylphenol	<100	NA	NA	NA	NA	NA	<50	<50
Anthracene	<100	<50	NA	<200	<50	<50	<50	<50
Benzo(a)anthracene	<100	<50	NA	<200	<50	<50	<50	<50
Benzo(a)pyrene	<100	28 J	NA	<200	<50	<50	<50	<50
Benzo(b)fluoranthene	<100	<50	NA	<200	<50	<50	<50	<50
Benzo(g,h,i)perylene	<100	27 J	NA	<200	<50	17 J	<50	<50
Benzo(k)fluoranthene	<100 J	33 J	NA	<200	<50	<50	<50	<50 J
bis(2-Ethylhexyl)phthalate	<100	<50	NA	<200	<50	<50	<50	<50
Butylbenzylphthalate	<100	<50	NA	<200	<50	<50	<50	<50
Carbazole	<100 J	<50	NA	<200	<50	<50	<50	<50 J
Chrysene	<100	<50	NA	<200	<50	<50	<50	<50
Dibenzo(a,h)anthracene	<100	<50	NA	<200	<50	14 J	<50	<50
Diethylphthalate	<100	<50	NA	<200	<50	<50	<50	<50
Dimethylphthalate	<100	<50	NA	<200	<50	<50	<50	<50
Di-n-butylphthalate	<100	<50	NA	<200	<50	<50	<50	<50
Di-n-octylphthalate	<100	<50	NA	<200	<50	<50	<50	<50
Fluoranthene	<100	<50	NA	<200	<50	<50	<50	<50
Hexachlorobenzene	<100	<50	NA	<200	<50	<50	<50	<50
Indeno(1,2,3-c,d)pyrene	<100	26 J	NA	<200	<50	16 J	<50	<50
Naphthalene	<200	<50	NA	<200	<50	<50	<100	<100
Phenanthrene	<100	<50	NA	<200	<50	<50	<50	<50
Phenol	<100	<50	<50	<200	<50	<50	<50	<50
Pyrene	<100	<50	NA	<200	<50	<50	<50	<50

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27A (continued)			GM-27B				
Top of Screen Depth (ft bls)	30	30	30	145	145	145	145	145
Sample Date	12/01/99	09/10/03	05/13/04	10/26/98	04/14/99	07/18/00	09/10/03	04/30/04
Sample ID	GM-27A	GM-27A	GWGM-27A (5/13/04)	GWGM-27B	GWGM-27B	GWGM-27B	GM-27B	GWGM-27B (4/30/04)
2,3-Dimethylphenol	NA	210	<50	NA	<10	NA	<10	<10
2,4-Dimethylphenol	**890**	NA	NA	<5	<5	<5.0	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	**1,900**	**940**	NA	NA	NA	<10	<10
2,5-Dimethylphenol	NA	NA	NA	NA	<20	NA	NA	NA
2,6-Dimethylphenol	NA	630	230	NA	<10	NA	<10	<10
2-Methylnaphthalene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
2-Methylphenol	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
2-Nitrophenol	<20	<50	<25	<20	<20	<5.0	<5.0	<5.0
3,4-Dimethylphenol	NA	130	74	NA	<10	NA	<10	<10
3-Methylphenol	NA	NA	NA	<10	<10	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<20	***570***	***600***	NA	NA	<5.0	<5.0	<5.0
4-Methylphenol	NA	NA	NA	<5	<5	NA	NA	NA
Anthracene	<20	<50	<25	<5	<5	<5.0	<5.0	0.65 J
Benzo(a)anthracene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Benzo(a)pyrene	<20	<50	<25	<5	<5	<5.0	<5.0	1.4 J
Benzo(b)fluoranthene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Benzo(g,h,i)perylene	<20	<50	<25	<5	<5 J	<5.0	<5.0	5.7
Benzo(k)fluoranthene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<20	<50	<25	<5	<5	0.81 J	<5.0	<5.0
Butylbenzylphthalate	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Carbazole	<20	<50	<25	<5	<5 J	<5.0	<5.0	0.70 J
Chrysene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<20	<50	<25	<5	<5 J	<5.0	<5.0	4.8 J
Diethylphthalate	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Dimethylphthalate	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Di-n-butylphthalate	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Di-n-octylphthalate	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Fluoranthene	<20	<50	<25	<5	<5	<5.0	<5.0	0.72 J
Hexachlorobenzene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<20	<50	<25	<5	<5 J	<5.0 J	<5.0	4.6 J
Naphthalene	<20	<50	<25	<10	<10	<5.0	<5.0	<5.0
Phenanthrene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0
Phenol	<20	<50	<25	22	<5	0.52 J	<5.0	1.0 J
Pyrene	<20	<50	<25	<5	<5	<5.0	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27B (continued)			GM-27C			
Top of Screen Depth (ft bls)	145	145	145	210	210	210	210
Sample Date	04/30/04	08/05/05	12/07/06	11/09/98	04/26/99	04/26/99	08/07/00
Sample ID	GWGM-998 (4/30/04)	GWGM-27B (08/05/05)	GWGM27B (12/7/06)	GWGM-27C	GWGM-27C	GWGM-86	GMGW-27C
2,3-Dimethylphenol	<10	<9.5	<10	NA	<10	<10	NA
2,4-Dimethylphenol	NA	<4.8	<5.0	<5	<5	<5	<5.0
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	<9.5	<10	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	<20	<20	NA
2,6-Dimethylphenol	<10	<9.5	<10	NA	<10	<10	NA
2-Methylnaphthalene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
2-Methylphenol	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
2-Nitrophenol	<5.0	<4.8	<5.0	<20	<20	<20	<5.0
3,4-Dimethylphenol	<10	<9.5	<10	NA	<10	<10	NA
3-Methylphenol	NA	NA	NA	<10	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<4.8	<5.0	NA	NA	NA	<5.0
4-Methylphenol	NA	NA	NA	<5	<5	<5	NA
Anthracene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Benzo(a)anthracene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Benzo(a)pyrene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Benzo(b)fluoranthene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Benzo(g,h,i)perylene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Benzo(k)fluoranthene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Butylbenzylphthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Carbazole	<5.0	<4.8	<5.0	<5	<5 J	<5 J	<5.0
Chrysene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Dibenzo(a,h)anthracene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Diethylphthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Dimethylphthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Di-n-butylphthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Di-n-octylphthalate	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Fluoranthene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Hexachlorobenzene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0 J
Naphthalene	<5.0	<4.8	<5.0	<10	<10	<10	<5.0
Phenanthrene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0
Phenol	1.0 J	<4.8	<5.0	<5	<5	<5	<5.0
Pyrene	<5.0	<4.8	<5.0	<5	<5	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-27C (continued)			GM-28A			
Top of Screen Depth (ft bls)	210	210	210	40	40	40	40
Sample Date	09/11/03	04/30/04	08/05/05	10/28/98	04/19/99	02/29/00	07/19/00
Sample ID	GM-27C	GWGM-27C (4/30/04)	GWGM-27C (08/05/05)	GWGM-28A	GWGM-28A	GWGM-28A	GWGM-28A
2,3-Dimethylphenol	<10	<10	<9.5	NA	R	NA	NA
2,4-Dimethylphenol	NA	NA	<4.8	R	R	<5	<5.0
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	<10	<9.5	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	R	NA	NA
2,6-Dimethylphenol	<10	<10	<9.5	NA	R	NA	NA
2-Methylnaphthalene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
2-Methylphenol	<5.0	<5.0	<4.8	R	R	<5	<5.0
2-Nitrophenol	<5.0	<5.0	<4.8	R	R	NA	<5.0
3,4-Dimethylphenol	<10	<10	<9.5	NA	R	NA	NA
3-Methylphenol	NA	NA	NA	R	R	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<4.8	NA	NA	<5	<5.0
4-Methylphenol	NA	NA	NA	R	R	NA	NA
Anthracene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Benzo(a)anthracene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Benzo(a)pyrene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Benzo(g,h,i)perylene	<5.0	2.4 J	<4.8	<5	<5	NA	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<4.8	<5	<5 J	NA	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<4.8	<5	<5	NA	0.84 J
Butylbenzylphthalate	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Carbazole	<5.0	<5.0	<4.8	<5	<5 J	NA	<5.0
Chrysene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Dibenzo(a,h)anthracene	<5.0	2.1 J	<4.8	<5	<5	NA	<5.0
Diethylphthalate	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Dimethylphthalate	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Di-n-butylphthalate	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Di-n-octylphthalate	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Fluoranthene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Hexachlorobenzene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	1.7 J	<4.8	<5	<5	NA	<5.0 J
Naphthalene	<5.0	<5.0	<4.8	<10	<10	NA	<5.0
Phenanthrene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0
Phenol	9.6	1.6 J	<4.8	<5	R	<5	<5.0
Pyrene	<5.0	<5.0	<4.8	<5	<5	NA	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28A (continued)				GM-28B
Top of Screen Depth (ft bls)	40	40	40	40	124.5
Sample Date	04/28/04	07/26/05	07/26/05	12/05/06	11/08/98
Sample ID	GWGM-28A (4/28/04)	GWGM28A (072605)	GWGM-999 (7/26/05)	GWGM-28A(12/5/06)	GWGM-28B
2,3-Dimethylphenol	<10	<10	<11	<10	NA
2,4-Dimethylphenol	NA	<5.0	<5.6	<5.0 *	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	<10	<11	<10	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	1.6 J	<10	<11	<10	NA
2-Methylnaphthalene	<5.0	<5.0	<5.6	<5.0	<5
2-Methylphenol	<5.0	<5.0	<5.6	<5.0	<5
2-Nitrophenol	<5.0	<5.0	<5.6	<5.0	<20
3,4-Dimethylphenol	<10	<10	<11	<10	NA
3-Methylphenol	NA	NA	NA	NA	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<5.6	<5.0	NA
4-Methylphenol	NA	NA	NA	NA	<5
Anthracene	<5.0	<5.0	<5.6	<5.0	<5
Benzo(a)anthracene	<5.0	<5.0	<5.6	<5.0	<5
Benzo(a)pyrene	<5.0	<5.0	<5.6	<5.0	<5
Benzo(b)fluoranthene	<5.0	<5.0	<5.6	<5.0	<5
Benzo(g,h,i)perylene	<5.0	<5.0	<5.6	<5.0	<5
Benzo(k)fluoranthene	<5.0	<5.0	<5.6	<5.0	<5
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.6	<5.0	<5
Butylbenzylphthalate	<5.0	<5.0	<5.6	<5.0	<5
Carbazole	<5.0	<5.0	<5.6	<5.0	<5
Chrysene	<5.0	<5.0	<5.6	<5.0	<5
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.6	<5.0	<5
Diethylphthalate	<5.0	<5.0	<5.6	<5.0	<5
Dimethylphthalate	<5.0	<5.0	<5.6	<5.0	<5
Di-n-butylphthalate	<5.0	<5.0	<5.6	<5.0	<5
Di-n-octylphthalate	<5.0	<5.0	<5.6	<5.0	<5
Fluoranthene	<5.0	<5.0	<5.6	<5.0	<5
Hexachlorobenzene	<5.0	<5.0	<5.6	<5.0	<5
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<5.6	<5.0	<5
Naphthalene	<5.0	<5.0	<5.6	<5.0	<10
Phenanthrene	<5.0	<5.0	<5.6	<5.0	<5
Phenol	<5.0	<5.0	<5.6	<5.0	<5
Pyrene	<5.0	<5.0	<5.6	<5.0	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)					
Top of Screen Depth (ft bls)	124.5	124.5	124.5	124.5	124.5	124.5
Sample Date	11/08/98	04/19/99	04/19/99	03/01/00	04/28/04	04/28/04
Sample ID	GWGM-96	GWGM-28B	GWGM-87	GWGM-28B	GWGM-28B (4/28/04)	GWGM-999 (4/28/04)
2,3-Dimethylphenol	NA	<10	<10	NA	<10	<10
2,4-Dimethylphenol	<5	<5	<5	<5	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	<10
2,5-Dimethylphenol	NA	<20	<20	NA	NA	NA
2,6-Dimethylphenol	NA	<10	<10	NA	<10	<10
2-Methylnaphthalene	<5	<5	<5	NA	<5.0	<5.0
2-Methylphenol	<5	<5	<5	<5	<5.0	<5.0
2-Nitrophenol	<20	<20	<20	NA	<5.0	<5.0
3,4-Dimethylphenol	NA	<10	<10	NA	<10	<10
3-Methylphenol	<10	<10	<10	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	<5	<5.0	<5.0
4-Methylphenol	<5	<5	<5	NA	NA	NA
Anthracene	<5	<5	<5	NA	<5.0	<5.0
Benzo(a)anthracene	<5	<5	<5	NA	<5.0	<5.0
Benzo(a)pyrene	<5	<5	<5	NA	<5.0	<5.0
Benzo(b)fluoranthene	<5	<5	<5	NA	<5.0	<5.0
Benzo(g,h,i)perylene	<5	<5	<5	NA	<5.0	<5.0
Benzo(k)fluoranthene	<5	<5 J	<5 J	NA	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5 J	<5 J	NA	<5.0	<5.0
Butylbenzylphthalate	<5	<5 J	<5 J	NA	<5.0	<5.0
Carbazole	<5	<5 J	<5 J	NA	<5.0	<5.0
Chrysene	<5	<5	<5	NA	<5.0	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5	NA	<5.0	<5.0
Diethylphthalate	<5	<5	<5	NA	<5.0	<5.0
Dimethylphthalate	<5	<5	<5	NA	<5.0	<5.0
Di-n-butylphthalate	<5	<5	<5	NA	<5.0	<5.0
Di-n-octylphthalate	<5	<5	<5	NA	<5.0	<5.0
Fluoranthene	<5	<5	<5	NA	<5.0	<5.0
Hexachlorobenzene	<5	<5	<5	NA	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	NA	<5.0	<5.0
Naphthalene	<10	<10	<10	NA	<5.0	<5.0
Phenanthrene	<5	<5	<5	NA	<5.0	<5.0
Phenol	<5	<5	<5	<5	<5.0	<5.0
Pyrene	<5	<5	<5	NA	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-28B (continued)		GM-29				
Top of Screen Depth (ft bls)	124.5	124.5	55	55	55	55	55
Sample Date	07/26/05	12/05/06	10/09/98	10/09/98	04/16/99	02/29/00	09/10/03
Sample ID	GWGM28B (072605)	GWGM-28B(12/5/06)	GWGM-29	GWGM-99	GWGM-29	GMGM-29	GM-29
2,3-Dimethylphenol	<9.9	<10	NA	NA	<10	NA	<10
2,4-Dimethylphenol	<5.0	<5.0 *	170	170	140	48	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	<9.9	<10	NA	NA	NA	NA	41
2,5-Dimethylphenol	NA	NA	NA	NA	<20	NA	NA
2,6-Dimethylphenol	<9.9	<10	NA	NA	70	NA	<10
2-Methylnaphthalene	<5.0	<5.0	<10	<10	<5	NA	<5.0
2-Methylphenol	<5.0	<5.0	<10	<10	<5	<5	<5.0
2-Nitrophenol	<5.0	<5.0	<20	<20	<20	NA	<5.0
3,4-Dimethylphenol	<9.9	<10	NA	NA	<10	NA	<10
3-Methylphenol	NA	NA	<20	<20	<10	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	NA	NA	NA	<5	<5.0
4-Methylphenol	NA	NA	<10	<10	<5	NA	NA
Anthracene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Benzo(a)anthracene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Benzo(a)pyrene	<5.0 *	<5.0	<10	<10	<5	NA	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Benzo(g,h,i)perylene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<10	<10	<5 J	NA	<5.0
bis(2-Ethylhexyl)phthalate	<5.0 *	<5.0	<10	<10	<5	NA	<5.0
Butylbenzylphthalate	<5.0 *	<5.0	<10	<10	<5	NA	<5.0
Carbazole	<5.0	<5.0	<10	<10	<5 J	NA	<5.0
Chrysene	<5.0 *	<5.0	<10	<10	<5	NA	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Diethylphthalate	<5.0	<5.0	<10	<10	<5	NA	<5.0
Dimethylphthalate	<5.0	<5.0	<10	<10	<5	NA	<5.0
Di-n-butylphthalate	<5.0	<5.0	<10	<10	**32**	NA	<5.0
Di-n-octylphthalate	<5.0	<5.0	<10	<10	<5	NA	<5.0
Fluoranthene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Hexachlorobenzene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Naphthalene	<5.0	<5.0	<20	<20	<10	NA	<5.0
Phenanthrene	<5.0	<5.0	<10	<10	<5	NA	<5.0
Phenol	<5.0	1.3 J	<10	<10	7	<5	<5.0
Pyrene	<5.0	<5.0	<10	<10	<5	NA	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-29 (continued)			GM-30			GM-31
Top of Screen Depth (ft bls)	55	55	55	75	75	75	105
Sample Date	05/03/04	07/28/05	12/08/06	10/27/98	05/12/99	05/12/99	10/24/98
Sample ID	GWGM-29 (5/3/04)	GWGM-29 (07/28/05)	GWGM-29 (12/8/06)	GWGM-30	GWGM-30	GWGM-83	GWGM-31
2,3-Dimethylphenol	<10	<9.4	<10	NA	R	R	NA
2,4-Dimethylphenol	NA	10	4.8 J	11	R	R	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	21	4.8 J	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	R	R	NA
2,6-Dimethylphenol	10	14	21	NA	R	R	NA
2-Methylnaphthalene	<5.0	<4.7	<5.0	<5	<5	<5	<5
2-Methylphenol	<5.0	<4.7	<5.0	<5	R	R	<5
2-Nitrophenol	<5.0	<4.7	<5.0	<20	R	R	<20
3,4-Dimethylphenol	<10	<9.4	<10	NA	R	R	NA
3-Methylphenol	NA	NA	NA	<10	R	R	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<4.7	<5.0	NA	NA	NA	NA
4-Methylphenol	NA	NA	NA	<5	R	R	<5
Anthracene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Benzo(a)anthracene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Benzo(a)pyrene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Benzo(b)fluoranthene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Benzo(k)fluoranthene	<5.0	<4.7	<5.0	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<5.0	<4.7	<5.0	<5	5.6	<5	<5
Butylbenzylphthalate	<5.0	<4.7	<5.0	<5	<5	<5	<5
Carbazole	<5.0	<4.7	<5.0	<5	<5 J	<5 J	<5
Chrysene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Diethylphthalate	<5.0	<4.7	<5.0	<5	<5	<5	<5
Dimethylphthalate	<5.0	<4.7	<5.0	<5	<5	<5	<5
Di-n-butylphthalate	<5.0	<4.7	<5.0	<5	<5	<5	<5
Di-n-octylphthalate	<5.0	<4.7	<5.0	<5	<5	<5	<5
Fluoranthene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Hexachlorobenzene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Naphthalene	<5.0	<4.7	<5.0	<10	<10	<10	<10
Phenanthrene	<5.0	<4.7	<5.0	<5	<5	<5	<5
Phenol	<5.0	<4.7	<5.0	<5	R	R	<5
Pyrene	<5.0	<4.7	<5.0	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-31 (continued)		GM-32				GM-33	
Top of Screen Depth (ft bls)	105	105	135	135	135	135	74	74
Sample Date	05/03/99	10/09/00	10/25/98	04/27/99	09/25/03	05/26/04	12/03/98	05/10/99
Sample ID	GWGM-31	GWGM-31	GWGM-32	GWGM-32	GM-32	GWGM-32(5/26/04)	GWGM-33	GWGM-33
2,3-Dimethylphenol	R	NA	NA	R	<1,000	190 J	NA	<10
2,4-Dimethylphenol	R	<5.0	***9,200***	**1,500 J**	NA	NA	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	***3,100***	**2,000**	NA	NA
2,5-Dimethylphenol	R	NA	NA	R	NA	NA	NA	<20
2,6-Dimethylphenol	R	NA	NA	650 J	1,100	510 J	NA	<10
2-Methylnaphthalene	<5	NA	<2,000	<120	<500	<500	<5	<5
2-Methylphenol	R	<5.0	***11,000***	***2,100 J***	***4,800***	<500	<5	<5
2-Nitrophenol	R	NA	<4,000	R	<500	<500	<20	<20
3,4-Dimethylphenol	R	NA	NA	R	<1,000	<1,000	NA	<10
3-Methylphenol	R	NA	***15,000***	***2,700 J***	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	<5.0	NA	NA	***15,000***	***8,300***	NA	NA
4-Methylphenol	R	NA	***15,000***	***2,700 J***	NA	NA	<5	<5
Anthracene	<5	NA	<2,000	<120	<500	<500	<5	<5
Benzo(a)anthracene	<5	NA	<2,000	<120	<500	<500	<5	<5
Benzo(a)pyrene	<5	NA	<2,000	<120	<500	<500	<5	<5
Benzo(b)fluoranthene	<5	NA	<2,000	<120	<500	<500	<5	<5
Benzo(g,h,i)perylene	<5	NA	<2,000	<120	<500	90 J	<5	<5
Benzo(k)fluoranthene	<5	NA	<2,000	<120	<500	<500	<5	<5
bis(2-Ethylhexyl)phthalate	15	NA	<2,000	<120	<500	<500	<5	<5
Butylbenzylphthalate	<5	NA	<2,000	<120	<500	<500	<5	<5
Carbazole	<5	NA	<2,000	<120	<500	<500	<5	<5 J
Chrysene	<5	NA	<2,000	<120	<500	<500	<5	<5
Dibenzo(a,h)anthracene	<5	NA	<2,000	<120	<500	71 J	<5	<5
Diethylphthalate	<5	NA	<2,000	<120	<500	<500	<5	<5
Dimethylphthalate	<5	NA	<2,000	<120	<500	<500	<5	<5
Di-n-butylphthalate	<5	NA	<2,000	<120	<500	<500	<5	<5
Di-n-octylphthalate	<5	NA	<2,000	<120	<500	<500	<5	<5
Fluoranthene	<5	NA	<2,000	<120	<500	<500	<5	<5
Hexachlorobenzene	<5	NA	<2,000	<120	<500	<500	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	NA	<2,000	<120	<500	<500	<5	<5
Naphthalene	<10	NA	<2,000	<250	<500	<500	<10	<10
Phenanthrene	<5	NA	<2,000	<120	<500	<500	<5	<5
Phenol	R	<5.0	***11,000***	**1,600**	***9,600***	<500	<5	<5
Pyrene	<5	NA	<2,000	<120	<500	<500	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-34A			GM-34B			
Top of Screen Depth (ft bls)	30	30	30	85	85	85	85
Sample Date	10/08/98	04/17/99	04/29/04	10/12/98	04/14/99	09/24/03	04/28/04
Sample ID	GWGM-34A	GWGM-34A	GWGM-34A (4/29/04)	GWGM-34B	GWGM-34B	GM-34B	GWGM-34B (4/28/04)
2,3-Dimethylphenol	NA	<10	<10	NA	<10	<10	<10
2,4-Dimethylphenol	<5	<5	NA	<5	<5	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	<10	NA	NA	<10	<10
2,5-Dimethylphenol	NA	<20	NA	NA	<20	NA	NA
2,6-Dimethylphenol	NA	<10	<10	NA	<10	<10	<10
2-Methylnaphthalene	<5	<5	<5.0	<5	<5	<5.0	<5.0
2-Methylphenol	<5	<5	<5.0	<5	<5	<5.0	<5.0
2-Nitrophenol	<20	<20	<5.0	<20	<20	<5.0	<5.0
3,4-Dimethylphenol	NA	<10	<10	NA	<10	<10	<10
3-Methylphenol	<10	<10	NA	<10	<10	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	<5.0	NA	NA	<5.0	<5.0
4-Methylphenol	<5	<5	NA	<5	<5	NA	NA
Anthracene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Benzo(a)anthracene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Benzo(a)pyrene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Benzo(b)fluoranthene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Benzo(g,h,i)perylene	<5	<5 J	<5.0	<5	<5 J	<5.0	<5.0
Benzo(k)fluoranthene	<5	<5	<5.0	<5	<5	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Butylbenzylphthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Carbazole	<5	<5 J	<5.0	<5	<5 J	<5.0	<5.0
Chrysene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Dibenzo(a,h)anthracene	<5	<5	<5.0	<5	<5 J	<5.0	<5.0
Diethylphthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Dimethylphthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Di-n-butylphthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Di-n-octylphthalate	<5	<5	<5.0	<5	<5	<5.0	<5.0
Fluoranthene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Hexachlorobenzene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<5	<5 J	<5.0	<5	<5 J	<5.0	<5.0
Naphthalene	<10	<10	<5.0	<10	<10	<5.0	<5.0
Phenanthrene	<5	<5	<5.0	<5	<5	<5.0	<5.0
Phenol	<5	<5	<5.0	<5	<5	<5.0	<5.0
Pyrene	<5	<5	<5.0	<5	<5	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-35			GM-36			GM-37A	
Top of Screen Depth (ft bls)	40	40	40	95	95	95	144	144
Sample Date	11/04/98	05/04/99	05/04/99	11/03/98	05/05/99	05/04/04	11/18/98	05/11/99
Sample ID	GWGM-35	GWGM-35	GWGM-84	GWGM-36	GWGM-36	GWGM-36 (5/4/04)	GWGM-37A	GWGM-37A
2,3-Dimethylphenol	NA	<10	<10	NA	<10	<10	NA	<500
2,4-Dimethylphenol	<5	<5	<5	<5	<5	NA	1,100	2,200
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	<10	NA	NA
2,5-Dimethylphenol	NA	<20	<20	NA	<20	NA	NA	<1,000
2,6-Dimethylphenol	NA	<10	<10	NA	<10	<10	NA	990
2-Methylnaphthalene	<5	<5	<5	<5	<5	<5.0	<250	<250
2-Methylphenol	<5	<5	<5	<5	<5	<5.0	2,100	3,300
2-Nitrophenol	<20	<20	<20	<20	<20	<5.0	<500	<500
3,4-Dimethylphenol	NA	<10	<10	NA	<10	<10	NA	<500
3-Methylphenol	<10	<10	<10	<10	<10	NA	3,100	5,900
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	<5.0	NA	NA
4-Methylphenol	<5	<5	<5	<5	<5	NA	3,100	5,900
Anthracene	<5	<5	<5	<5	<5	<5.0	<250	<250
Benzo(a)anthracene	<5	<5	<5	<5	<5	<5.0	<250	<250
Benzo(a)pyrene	<5	<5	<5	<5	<5	<5.0	<250	<250
Benzo(b)fluoranthene	<5	<5	<5	<5	<5	<5.0	<250	<250
Benzo(g,h,i)perylene	<5	<5	<5	<5	<5	<5.0	<250	<250
Benzo(k)fluoranthene	<5	<5	<5	<5	<5	<5.0	<250	<250
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5	9.6	<5.0	<250	<250
Butylbenzylphthalate	<5	<5	<5	<5	<5	<5.0	<250	<250
Carbazole	<5	<5	<5	<5	<5	<5.0	<250	<250 J
Chrysene	<5	<5	<5	<5	<5	<5.0	<250	<250
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5	<5.0	<250	<250
Diethylphthalate	<5	<5	<5	<5	<5	<5.0	<250	<250
Dimethylphthalate	<5	<5	<5	<5	<5	<5.0	<250	<250
Di-n-butylphthalate	<5	<5	<5	<5	<5	<5.0	<250	<250
Di-n-octylphthalate	<5	<5	<5	<5	<5	<5.0	<250	<250
Fluoranthene	<5	<5	<5	<5	<5	<5.0	<250	<250
Hexachlorobenzene	<5	<5	<5	<5	<5	<5.0	<250	<250
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5	<5.0	<250	<250
Naphthalene	<10	<10	<10	<10	<10	<5.0	<500	<500
Phenanthrene	<5	<5	<5	<5	<5	<5.0	<250	<250
Phenol	<5	<5	<5	<5	<5	<5.0	1,200	2,100
Pyrene	<5	<5	<5	<5	<5	<5.0	<250	<250

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-37A (continued)		GM-37B				GM-38A
Top of Screen Depth (ft bls)	144	144	328	328	328	328	95
Sample Date	09/25/03	05/17/04	10/13/98	05/14/99	09/25/03	05/27/04	10/13/98
Sample ID	GM-37A	GWGM-37A (5/17/04)	GWGM-37B	GWGM-37B	GM-37B	GWGM-37B (5/27/04)	GWGM-38A
2,3-Dimethylphenol	<400	3,400	NA	<1,000	<500	3,600	NA
2,4-Dimethylphenol	NA	NA	360	2,700	NA	NA	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	920	1,200	NA	NA	2,000	2,200	NA
2,5-Dimethylphenol	NA	NA	NA	<2,000	NA	NA	NA
2,6-Dimethylphenol	<400	<400	NA	<1,000	720	610	NA
2-Methylnaphthalene	<200	<200	<25	<500	<250	<250	<5
2-Methylphenol	<200	1,100	380	3,800	1,400	1,700	<5
2-Nitrophenol	<200	<200	<50	<1,000	<250	<250	<20
3,4-Dimethylphenol	<400	140 J	NA	<1,000	<500	330 J	NA
3-Methylphenol	NA	NA	800	8,500	NA	NA	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	3,400	5,900	NA	NA	5,700	5,200	NA
4-Methylphenol	NA	NA	800	8,500	NA	NA	<5
Anthracene	<200	<200	<25	<500	<250	<250	<5
Benzo(a)anthracene	<200	<200	<25	<500	<250	<250	<5
Benzo(a)pyrene	<200	32 J	<25	<500	<250	<250	<5
Benzo(b)fluoranthene	<200	<200	<25	<500	<250	<250	<5
Benzo(g,h,i)perylene	<200	100 J	<25	<500	<250	<250	<5
Benzo(k)fluoranthene	<200	<200	<25	<500	<250	<250	<5
bis(2-Ethylhexyl)phthalate	<200	<200	<25	<500	<250	<250	<5
Butylbenzylphthalate	<200	<200	<25	<500	<250	<250	<5
Carbazole	<200	<200	<25	<500 J	<250	<250	<5
Chrysene	<200	<200	<25	<500	<250	<250	<5
Dibenzo(a,h)anthracene	<200	87 J	<25	<500	<250	<250	<5
Diethylphthalate	<200	<200	<25	<500	<250	<250	<5
Dimethylphthalate	<200	<200	<25	<500	<250	<250	<5
Di-n-butylphthalate	<200	<200	<25	<500	<250	<250	<5
Di-n-octylphthalate	<200	<200	<25	<500	<250	<250	<5
Fluoranthene	<200	<200	<25	<500	<250	<250	<5
Hexachlorobenzene	<200	<200	<25	<500	<250	<250	<5
Indeno(1,2,3-c,d)pyrene	<200	92 J	<25	<500	<250	<250	<5
Naphthalene	<200	<200	<50	<1000	<250	<250	<10
Phenanthrene	<200	<200	<25	<500	<250	<250	<5
Phenol	<200	1,300	280	4,300	2,700	2,900	<5
Pyrene	<200	<200	<25	<500	<250	<250	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-38A (continued)	GM-38B			GM-38C			GM-39
Top of Screen Depth (ft bls)	95	95	160	160	200	200	200	85
Sample Date	10/13/98	04/15/99	10/14/98	04/29/99	10/20/98	10/20/98	04/30/99	10/12/98
Sample ID	GWGM-98	GWGM-38A	GWGM-38B	GWGM-38B	GWGM-38C	GWGM-97	GWGM-38C	GWGM-39
2,3-Dimethylphenol	NA	<10 J	NA	<10	NA	NA	<10	NA
2,4-Dimethylphenol	<5	<5 J	<5	<5	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	<20 J	NA	<20	NA	NA	<20	NA
2,6-Dimethylphenol	NA	<10 J	NA	<10	NA	NA	<10	NA
2-Methylnaphthalene	<5	<5 J	<5	<5	<5	<5	<5	<5
2-Methylphenol	<5	<5 J	<5	<5	<5	<5	<5	<5
2-Nitrophenol	<20	<20 J	<20	<20	<20	<20	<20	<20
3,4-Dimethylphenol	NA	<10 J	NA	<10	NA	NA	<10	NA
3-Methylphenol	<10	<10 J	<10	<10	<10	<10	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<5	<5 J	<5	<5	<5	<5	<5	<5
Anthracene	<5	<5 J	<5	<5	<5	<5	<5	<5
Benzo(a)anthracene	<5	<5 J	<5	<5	<5	<5	<5	<5
Benzo(a)pyrene	<5	<5 J	<5	<5	<5	<5	<5	<5
Benzo(b)fluoranthene	<5	<5 J	<5	<5	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5 J	<5	<5	<5	<5	<5	<5
Benzo(k)fluoranthene	<5	<5 J	<5	<5	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Butylbenzylphthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Carbazole	<5	<5 J	<5	<5 J	<5	<5	<5	<5
Chrysene	<5	<5 J	<5	<5	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5 J	<5	<5	<5	<5	<5	<5
Diethylphthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Dimethylphthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Di-n-butylphthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Di-n-octylphthalate	<5	<5 J	<5	<5	<5	<5	<5	<5
Fluoranthene	<5	<5 J	<5	<5	<5	<5	<5	<5
Hexachlorobenzene	<5	<5 J	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5 J	<5	<5	<5	<5	<5 J	<5
Naphthalene	<10	<10 J	<10	<10	<10	<10	<10	<10
Phenanthrene	<5	<5 J	<5	<5	<5	<5	<5	<5
Phenol	<5	<5 J	<5	<5	<5	<5	<5	<5
Pyrene	<5	<5 J	<5	<5	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-39 (continued)		GM-40A			GM-40B	
Top of Screen Depth (ft bls)	85	85	75	75	75	120	120
Sample Date	04/15/99	04/15/99	10/26/98	04/28/99	05/03/04	10/26/98	04/27/99
Sample ID	GWGM-39	GWGM-89	GWGM-40A	GWGM-40A	GWGM-40A (5/3/04)	GWGM-40B	GWGM-40B
2,3-Dimethylphenol	<10	<10	NA	<10	<10	NA	<1,000
2,4-Dimethylphenol	<5	<5	<5	<5	NA	2,400	2,700
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	<10	NA	NA
2,5-Dimethylphenol	<20	<20	NA	<20	NA	NA	<2,000
2,6-Dimethylphenol	<10	<10	NA	<10	<10	NA	1400
2-Methylnaphthalene	<5	<5	<5	<5	<5.0	<500	<500
2-Methylphenol	<5	<5	<5	<5	<5.0	2,800	4,900
2-Nitrophenol	<20	<20	<20	<20	<5.0	<1,000	<1,000
3,4-Dimethylphenol	<10	<10	NA	<10	<10	NA	<1,000
3-Methylphenol	<10	<10	<10	<10	NA	5,000	9,400
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	<5.0	NA	NA
4-Methylphenol	<5	<5	<5	<5	NA	5,000	9,400
Anthracene	<5	<5	<5	<5	<5.0	<500	<500
Benzo(a)anthracene	<5	<5	<5	<5	<5.0	<500	<500
Benzo(a)pyrene	<5	<5	<5	<5	<5.0	<500	<500
Benzo(b)fluoranthene	<5 J	<5 J	<5	<5	<5.0	<500	<500
Benzo(g,h,i)perylene	<5 J	<5 J	<5	<5	<5.0	<500	<500
Benzo(k)fluoranthene	<5	<5	<5	<5	<5.0	<500	<500
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5	<5.0	<500	<500
Butylbenzylphthalate	<5	<5	<5	<5	<5.0	<500	<500
Carbazole	<5 J	<5 J	<5	<5	<5.0	<500	<500
Chrysene	<5	<5	<5	<5	<5.0	<500	<500
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<5.0	<500	<500
Diethylphthalate	<5	<5	<5	<5	<5.0	<500	<500
Dimethylphthalate	<5	<5	<5	<5	<5.0	<500	<500
Di-n-butylphthalate	<5	<5	<5	<5	<5.0	<500	<500
Di-n-octylphthalate	<5	<5	<5	<5	<5.0	<500	<500
Fluoranthene	<5	<5	<5	<5	<5.0	<500	<500
Hexachlorobenzene	<5	<5	<5	<5	<5.0	<500	<500
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	<5.0	<500	<500
Naphthalene	<10	<10	<10	<10	<5.0	<1,000	<1,000
Phenanthrene	<5	<5	<5	<5	<5.0	<500	<500
Phenol	<5	<5	<5	<5	<5.0	3,800	4,500
Pyrene	<5	<5	<5	<5	<5.0	<500	<500

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-40B (continued)	GM-41		GM-42		GM-49	GM-50	
Top of Screen Depth (ft bls)	120	40	40	72	72	83.5	80.5	80.5
Sample Date	05/19/04	10/19/98	04/16/99	10/20/98	04/16/99	04/17/99	10/14/98	04/17/99
Sample ID	GWGM-40B (5/19/04)	GWGM-41	GWGM-41	GWGM-42	GWGM-42	GWGM-49	GWGM-50	GWGM-50
2,3-Dimethylphenol	180 J	NA	<10	NA	<10	<10	NA	R
2,4-Dimethylphenol	NA	<5	<5	<5	<5	<5	R	R
2,4-Dimethylphenol/2,5-Dimethylphenol	**2,100**	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	<20	NA	<20	<20	NA	R
2,6-Dimethylphenol	480 J	NA	<10	NA	<10	<10	NA	R
2-Methylnaphthalene	<500	<5	<5	<5	<5	<5	<5	<5
2-Methylphenol	***1,900***	<5	<5	<5	<5	<5	R	R
2-Nitrophenol	<500	<20	<20	<20	<20	<20	R	R
3,4-Dimethylphenol	280 J	NA	<10	NA	<10	<10	NA	R
3-Methylphenol	NA	<10	<10	<10	<10	<10	R	R
3-Methylphenol/4-Methylphenol(m&p-cresol)	***7,000***	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	NA	<5	<5	<5	<5	<5	R	R
Anthracene	<500	<5	<5	<5	<5	<5	<5	<5
Benzo(a)anthracene	<500	<5	<5	<5	<5	<5	<5	<5
Benzo(a)pyrene	<500	<5	<5	<5	<5	<5	<5	<5
Benzo(b)fluoranthene	<500	<5	<5	<5	<5	<5	<5	<5
Benzo(g,h,i)perylene	<500	<5	<5	<5	<5	<5 J	<5	<5 J
Benzo(k)fluoranthene	<500	<5	<5 J	<5	<5 J	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<500	<5	<5	<5	<5	<5	<5	<5
Butylbenzylphthalate	<500	<5	<5	<5	<5	<5	<5	<5
Carbazole	<500	<5	<5 J	<5	<5 J	<5 J	<5	<5 J
Chrysene	<500	<5	<5	<5	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<500	<5	<5	<5	<5	<5	<5	<5
Diethylphthalate	<500	<5	<5	<5	<5	<5	<5	<5
Dimethylphthalate	<500	<5	<5	<5	<5	<5	<5	<5
Di-n-butylphthalate	<500	<5	<5	<5	<5	<5	<5	<5
Di-n-octylphthalate	<500	<5	<5	<5	<5	<5	<5	<5
Fluoranthene	<500	<5	<5	<5	<5	<5	<5	<5
Hexachlorobenzene	<500	<5	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<500	<5	<5	<5	<5	<5 J	<5	<5 J
Naphthalene	<500	<10	<10	<10	<10	<10	<10	<10
Phenanthrene	<500	<5	<5	<5	<5	<5	<5	<5
Phenol	**2,500**	<5	<5	<5	<5	<5	<5	R
Pyrene	<500	<5	<5	<5	<5	<5	R	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-51		GM-52	GM-53A	GM-53B		GM-54		GM-55
Top of Screen Depth (ft bls)	67	67	75	79	195	195	80	80	75
Sample Date	10/20/98	04/18/99	04/19/99	04/19/99	11/05/98	05/01/99	10/24/98	05/01/99	10/24/98
Sample ID	GWGM-51	GWGM-51	GWGM-52	GWGM-53A	GWGM-53B	GWGM-53B	GWGM-54	GWGM-54	GWGM-55
2,3-Dimethylphenol	NA	<10	<10	R	NA	<100	NA	<10	NA
2,4-Dimethylphenol	<5	<5	<5	R	270	**410**	<5	<5	13 J
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	NA	<20	<20	R	NA	<200	NA	<20	NA
2,6-Dimethylphenol	NA	<10	<10	R	NA	190	NA	<10	NA
2-Methylnaphthalene	<5	<5	<5	<5	<10	<50	<5	<5	<5
2-Methylphenol	<5	<5	<5	R	<10	<50	<5	<5	<5
2-Nitrophenol	<20	<20	<20	R	<20	<100	<20	<20	<20
3,4-Dimethylphenol	NA	<10	<10	R	NA	<100	NA	<10	NA
3-Methylphenol	<10	<10	<10	R	<20	<100	<10	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<5	<5	<5	R	<10	<50	<5	<5	<5
Anthracene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Benzo(a)anthracene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Benzo(a)pyrene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Benzo(b)fluoranthene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5 J	<5 J	<5	<10	<50	<5	<5	<5
Benzo(k)fluoranthene	<5	<5	<5	<5 J	<10	<50	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<5	<5	<5	<5 J	<10	<50	9.60 J	<5	<5
Butylbenzylphthalate	<5	<5	<5	<5 J	<10	<50	<5	<5	<5
Carbazole	<5	<5 J	<5 J	<5 J	<10	<50	<5	<5	<5
Chrysene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Diethylphthalate	<5	<5	<5	<5	<10	<50	<5	<5	<5
Dimethylphthalate	<5	<5	<5	<5	<10	<50	<5	<5	<5
Di-n-butylphthalate	<5	<5	<5	<5	<10	<50	<5	<5	<5
Di-n-octylphthalate	<5	<5	<5	<5	<10	<50	<5	<5	<5
Fluoranthene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Hexachlorobenzene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5 J	<5 J	<5	<10	<50	<5	<5	<5
Naphthalene	<10	<10	<10	<10	<20	<100	<10	<10	<10
Phenanthrene	<5	<5	<5	<5	<10	<50	<5	<5	<5
Phenol	<5	<5	<5	R	<10	<50	<5	<5	<5
Pyrene	<5	<5	<5	<5	<10	<50	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-55 (continued)		GM-56		GM-57	GM-58	GM-59	
Top of Screen Depth (ft bls)	75	75	32	32	76	75	114	114
Sample Date	05/01/99	05/01/99	10/21/98	04/20/99	04/20/99	04/26/99	11/17/98	04/28/99
Sample ID	GWGM-55	GWGM-85	GWGM-56	GWGM-56	GWGM-57	GWGM-58	GWGM-59	GWGM-59
2,3-Dimethylphenol	<20	<20	NA	<10	<10	<10	NA	<10
2,4-Dimethylphenol	<10	<10	<5	<5	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA
2,5-Dimethylphenol	<40	<40	NA	<20	<20	<20	NA	<20
2,6-Dimethylphenol	<20	<20	NA	<10	<10	<10	NA	<10
2-Methylnaphthalene	<10	<10	<5	<5	<5	<5	<5	<5
2-Methylphenol	<10	<10	<5	<5	<5	<5	<5	<5
2-Nitrophenol	<20	<20	<20	<20	<20	<20	<20	<20
3,4-Dimethylphenol	<20	<20	NA	<10	<10	<10	NA	<10
3-Methylphenol	<20	<20	<10	<10	<10	<10	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	<10	<10	<5	<5	<5	<5	<5	<5
Anthracene	<10	<10	<5	<5	<5	<5	<5	<5
Benzo(a)anthracene	<10	<10	<5	<5	<5	<5	<5	<5
Benzo(a)pyrene	<10	<10	<5	<5	<5	<5	<5	<5
Benzo(b)fluoranthene	<10	<10	<5	<5	<5	<5	<5	<5
Benzo(g,h,i)perylene	<10	<10	<5	<5	<5	<5	<5	<5
Benzo(k)fluoranthene	<10	<10	<5	<5 J	<5 J	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<10	<10	<5	<5 J	<5 J	<5	<5	<5
Butylbenzylphthalate	<10	<10	<5	<5 J	<5 J	<5	<5	<5
Carbazole	<10	<10	<5	<5 J	<5 J	<5 J	<5	<5 J
Chrysene	<10	<10	<5	<5	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<10	<10	<5	<5	<5	<5	<5	<5
Diethylphthalate	<10	<10	<5	<5	<5	<5	<5	<5
Dimethylphthalate	<10	<10	<5	<5	<5	<5	<5	<5
Di-n-butylphthalate	<10	<10	<5	<5	<5	<5	<5	<5
Di-n-octylphthalate	<10	<10	<5	<5	<5	<5	<5	<5
Fluoranthene	<10	<10	<5	<5	<5	<5	<5	<5
Hexachlorobenzene	<10	<10	<5	<5	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<10	<10	<5	<5	<5	<5	<5	<5
Naphthalene	<20	<20	<10	<10	<10	<10	<10	<10
Phenanthrene	<10	<10	<5	<5	<5	<5	<5	<5
Phenol	<10	<10	<5	<5	<5	<5	<5	<5
Pyrene	<10	<10	<5	<5	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-60	GM-61	GM-62A		GM-62B		
Top of Screen Depth (ft bls)	102	138	90	90	195	195	195
Sample Date	05/12/99	05/03/99	08/23/99	05/11/04	08/24/99	08/24/99	05/19/04
Sample ID	GWGM-60	GWGM-61	GWGM-62A	GWGM-62A (5/11/04)	GWGM-62B	GWGM-82	GWGM-62B (5/19/04)
2,3-Dimethylphenol	<10	<10	NA	<10	NA	NA	83 J
2,4-Dimethylphenol	<5	<5	<5.0	NA	1,300 J	970 J	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	<10	NA	NA	670
2,5-Dimethylphenol	<20	<20	NA	NA	NA	NA	NA
2,6-Dimethylphenol	<10	<10	NA	3.3 J	NA	NA	210 J
2-Methylnaphthalene	<5	<5	<5.0	<5.0	<100	<100	<120
2-Methylphenol	<5	<5	<5.0	<5.0	2,100 J	1,600 J	610
2-Nitrophenol	<20	<20	<5.0	<5.0	<100	<100	<120
3,4-Dimethylphenol	<10	<10	NA	<10	NA	NA	<250
3-Methylphenol	<10	<10	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	<5.0	<5.0	6,100 J	4,600 J	3,000
4-Methylphenol	<5	<5	NA	NA	NA	NA	NA
Anthracene	<5	<5	<5.0	<5.0	<100	<100	<120
Benzo(a)anthracene	<5	<5	<5.0	<5.0	<100	<100	<120
Benzo(a)pyrene	<5	<5	<5.0	<5.0	<100	<100	<120
Benzo(b)fluoranthene	<5	<5	<5.0	<5.0	<100	<100	<120
Benzo(g,h,i)perylene	<5	<5	<5.0	<5.0	<100	<100	<120
Benzo(k)fluoranthene	<5	<5	<5.0	<5.0	<100	<100	<120
bis(2-Ethylhexyl)phthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Butylbenzylphthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Carbazole	<5 J	<5	<5.0	<5.0	<100	<100	<120
Chrysene	<5	<5	<5.0	<5.0	<100	<100	<120
Dibenzo(a,h)anthracene	<5	<5	<5.0	<5.0	<100	<100	<120
Diethylphthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Dimethylphthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Di-n-butylphthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Di-n-octylphthalate	<5	<5	<5.0	<5.0	<100	<100	<120
Fluoranthene	<5	<5	<5.0	<5.0	<100	<100	<120
Hexachlorobenzene	<5	<5	<5.0	<5.0	<100	<100	<120
Indeno(1,2,3-c,d)pyrene	<5	<5	<5.0	<5.0	<100	<100	<120
Naphthalene	<10	<10	<5.0	<5.0	<100	<100	<120
Phenanthrene	<5	<5	<5.0	<5.0	<100	<100	<120
Phenol	<5	<5	<5.0	<5.0	3,300	2,600	760
Pyrene	<5	<5	<5.0	<5.0	<100	<100	<120

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-62C		GM-63A			
Top of Screen Depth (ft bls)	315	315	45	45	45	45
Sample Date	08/24/99	05/18/04	08/29/00	09/19/00	09/15/03	05/05/04
Sample ID	GWGM-62C	GWGM-62C (5/18/04)	GWGM-63A	GWGM-63A	GM-63A	GWGM-63A (5/5/04)
2,3-Dimethylphenol	NA	880	NA	NA	160	260 E
2,4-Dimethylphenol	1,300	NA	380 D	420	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	530	NA	NA	370	<10
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	120	NA	NA	140	250 E
2-Methylnaphthalene	<200	<50	<5.0	<10	<20	<5.0
2-Methylphenol	490	140	<5.0	<10	<20	<5.0
2-Nitrophenol	<200	<50	<5.0	<10	<20	<5.0
3,4-Dimethylphenol	NA	54 J	NA	NA	<40	<10
3-Methylphenol	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	6,700	1,000	<5.0	<10	<20	<5.0
4-Methylphenol	NA	NA	NA	NA	NA	NA
Anthracene	<200	<50	<5.0	<10	<20	<5.0
Benzo(a)anthracene	<200	<50	<5.0	<10	<20	<5.0
Benzo(a)pyrene	<200	<50	<5.0	<10	<20	<5.0
Benzo(b)fluoranthene	<200	<50	<5.0	<10	<20	<5.0
Benzo(g,h,i)perylene	<200	24 J	<5.0	<10	<20	<5.0
Benzo(k)fluoranthene	<200	<50	<5.0	<10	<20	<5.0
bis(2-Ethylhexyl)phthalate	<200	<50	<5.0	<10	<20	<5.0
Butylbenzylphthalate	<200	<50	<5.0	<10	<20	<5.0
Carbazole	<200	<50	<5.0	<10	<20	<5.0
Chrysene	<200	<50	<5.0	<10	<20	<5.0
Dibenzo(a,h)anthracene	<200	20 J	<5.0	<10	<20	<5.0
Diethylphthalate	<200	<50	<5.0	<10	<20	<5.0
Dimethylphthalate	<200	<50	<5.0	<10	<20	<5.0
Di-n-butylphthalate	<200	<50	<5.0	<10	<20	<5.0
Di-n-octylphthalate	<200	<50	<5.0	<10	<20	<5.0
Fluoranthene	<200	<50	<5.0	<10	<20	<5.0
Hexachlorobenzene	<200	<50	<5.0	<10	<20	<5.0
Indeno(1,2,3-c,d)pyrene	<200	21 J	<5.0	<10	<20	<5.0
Naphthalene	<200	<50	<5.0	<10	<20	<5.0
Phenanthrene	<200	<50	<5.0	<10	<20	<5.0
Phenol	1,800	390	<5.0	<10	<20	<5.0
Pyrene	<200	<50	<5.0	<10	<20	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-63A (continued)	GM-63B			GM-64A	
Top of Screen Depth (ft bls)	45	105	105	105	33	33
Sample Date	05/05/04	02/07/01	09/11/03	04/27/04	08/30/00	10/03/00
Sample ID	GWGM-63A (5/5/04)-DL	GWGM-63B	GM-63B	GWGM-63B (4/27/04)-RE	GWGM-64A	GWGM-64A
2,3-Dimethylphenol	230 D	NA	<10	<10	NA	NA
2,4-Dimethylphenol	NA	<5.0	NA	NA	23	<5.0
2,4-Dimethylphenol/2,5-Dimethylphenol	<50	NA	<10	<10	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	210 D	NA	<10	<10	NA	NA
2-Methylnaphthalene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylphenol	<25	<5.0	<5.0	<5.0	<5.0	<5.0
2-Nitrophenol	<25	<5.0	<5.0	<5.0	<5.0	<5.0
3,4-Dimethylphenol	<50	NA	<10	<10	NA	NA
3-Methylphenol	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<25	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methylphenol	NA	NA	NA	NA	NA	NA
Anthracene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)pyrene	<25	<5.0	<5.0	0.74 J	<5.0	<5.0
Benzo(b)fluoranthene	<25	<5.0 J	<5.0	<5.0	<5.0	<5.0
Benzo(g,h,i)perylene	<25	<5.0	<5.0	2.3 J	1.2 J	<5.0
Benzo(k)fluoranthene	<25	<5.0 J	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<25	1.0 J	<5.0	<5.0	<5.0	<5.0
Butylbenzylphthalate	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Carbazole	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<25	<5.0	<5.0	2.1 J	<5.0	<5.0
Diethylphthalate	<25	1.5 J	<5.0	<5.0	<5.0	<5.0
Dimethylphthalate	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butylphthalate	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octylphthalate	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<25	<5.0	<5.0	2.2 J	<5.0	<5.0
Naphthalene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Phenanthrene	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol	<25	<5.0	<5.0	<5.0	<5.0	<5.0
Pyrene	<25	R	<5.0	<5.0	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-64A (continued)		GM-64B				
Top of Screen Depth (ft bls)	33	33	117	117	117	117	117
Sample Date	09/08/03	05/04/04	07/24/00	10/04/00	09/08/03	05/11/04	05/11/04
Sample ID	GM-64A	GWGM-64A (5/4/04)	GWGM-64B	GWGM-64B	GM-64B	GWGM-64B (5/11/04)	GWGM-64B (5/11/04)-DL
2,3-Dimethylphenol	<10	<10	NA	NA	<40	40	37 DJ
2,4-Dimethylphenol	NA	NA	430	490 DJ	NA	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	<10	NA	NA	510	490 E	610 D
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	14	<10	NA	NA	<40	140	140 D
2-Methylnaphthalene	<5.0	<5.0	<25	NA	<20	<5.0	<25
2-Methylphenol	<5.0	<5.0	<25	<5.0 J	<20	<5.0	<25
2-Nitrophenol	<5.0	<5.0	<25	NA	<20	<5.0	<25
3,4-Dimethylphenol	<10	<10	NA	NA	<40	<10	<50
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<25	<5.0 J	<20	<5.0	<25
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Benzo(a)anthracene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Benzo(a)pyrene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Benzo(b)fluoranthene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Benzo(g,h,i)perylene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Benzo(k)fluoranthene	<5.0	<5.0	<25	NA	<20	<5.0	<25
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<25	NA	<20	<5.0	<25
Butylbenzylphthalate	<5.0	<5.0	<25	NA	<20	<5.0	<25
Carbazole	<5.0	<5.0	<25	NA	<20	<5.0	<25
Chrysene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Dibenzo(a,h)anthracene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Diethylphthalate	<5.0	<5.0	<25	NA	<20	<5.0	<25
Dimethylphthalate	<5.0	<5.0	<25	NA	<20	<5.0	<25
Di-n-butylphthalate	<5.0	1.2 J	<25	NA	<20	<5.0	<25
Di-n-octylphthalate	<5.0	<5.0	<25	NA	<20	<5.0	<25
Fluoranthene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Hexachlorobenzene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Naphthalene	<5.0	1.0 J	<25	NA	<20	<5.0	<25
Phenanthrene	<5.0	<5.0	<25	NA	<20	<5.0	<25
Phenol	<5.0	<5.0	<25	<5.0 J	<20	<5.0	<25
Pyrene	<5.0	<5.0	<25	NA	<20	<5.0	<25

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-66A				GM-66B		
Top of Screen Depth (ft bls)	27	27	27	27	125	125	125
Sample Date	07/18/00	09/16/03	04/27/04	07/27/05	07/19/00	08/03/00	09/11/03
Sample ID	GWGM-66A	GM-66A	GWGM-66A (4/27/04)	GWGM66A (072705)	GWGM-66B	GMGW-66B	GM-66B
2,3-Dimethylphenol	NA	<10	<10	<9.4	NA	NA	<40
2,4-Dimethylphenol	<5.0	NA	NA	<4.7	<5.0	510	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	<10	<10	<9.4	NA	NA	440
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	<10	<10	<9.4	NA	NA	<40
2-Methylnaphthalene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
2-Methylphenol	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
2-Nitrophenol	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
3,4-Dimethylphenol	NA	<10	<10	<9.4	NA	NA	<40
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Benzo(a)anthracene	<5.0	<5.0	<5.0	<4.7	1.5 J	<100	<20
Benzo(a)pyrene	<5.0	<5.0	<5.0	<4.7	1.7 J	<100	<20
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Benzo(g,h,i)perylene	<5.0	<5.0	<5.0	<4.7	1.3 J	<100	<20
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<4.7	1.9 J	<100	<20
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	1.0 J	4.1 J	24 J	<20
Butylbenzylphthalate	<5.0	<5.0	<5.0	<4.7	1.9 J	<100	<20
Carbazole	<5.0	<5.0	<5.0	<4.7	1.1 J	<100	<20
Chrysene	<5.0	<5.0	<5.0	<4.7	1.6 J	<100	<20
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Diethylphthalate	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Dimethylphthalate	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Di-n-butylphthalate	<5.0	<5.0	<5.0	<4.7	1.7 J	<100	<20
Di-n-octylphthalate	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Fluoranthene	<5.0	<5.0	<5.0	<4.7	0.88 J	<100	<20
Hexachlorobenzene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Indeno(1,2,3-c,d)pyrene	<5.0 J	<5.0	<5.0	<4.7	0.86 J	<100	<20
Naphthalene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Phenanthrene	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Phenol	<5.0	<5.0	<5.0	<4.7	<5.0	<100	<20
Pyrene	<5.0	<5.0	<5.0	<4.7	1.7 J	<100	<20

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

	GM-66B (continued)			GM-67	GM-68		GM-70
Top of Screen Depth (ft bls)	**125**	**125**	**125**	**122**	**140**	**140**	**42**
Sample Date	**05/10/04**	**07/27/05**	**12/08/06**	**08/07/00**	**08/31/00**	**09/26/00**	**08/17/00**
Sample ID	**GWGM-66B (5/10/04)**	**GWGM66B (072705)**	**GWGM-66B (12/8/06)**	**GWGM-67**	**GWGM-68**	**GWGM-68**	**GWGM-70**
2,3-Dimethylphenol	<20	<19	<10	NA	NA	NA	NA
2,4-Dimethylphenol	NA	240	11	<5.0	<5.0	<5.0	<5.0
2,4-Dimethylphenol/2,5-Dimethylphenol	360	240	24	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	120	130	70	NA	NA	NA	NA
2-Methylnaphthalene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
2-Methylphenol	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
2-Nitrophenol	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
3,4-Dimethylphenol	67	<19	<10	NA	NA	NA	NA
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
Anthracene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(a)anthracene	<10	<9.4	<5.0	<5.0	0.41 J	<5.0	<5.0
Benzo(a)pyrene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(b)fluoranthene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(g,h,i)perylene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Benzo(k)fluoranthene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Butylbenzylphthalate	<10	<9.4	<5.0	<5.0	<5.0	0.88 J	<5.0
Carbazole	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Chrysene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Dibenzo(a,h)anthracene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Diethylphthalate	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Dimethylphthalate	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-butylphthalate	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Di-n-octylphthalate	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Fluoranthene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Hexachlorobenzene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	<10	<9.4	<5.0	<5.0 J	<5.0	<5.0	<5.0
Naphthalene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Phenanthrene	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Phenol	<10	<9.4	<5.0	<5.0	<5.0	<5.0	<5.0
Pyrene	<10	<9.4	<5.0	<5.0	0.58 J	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-71	GM-72				GM-72A	
Top of Screen Depth (ft bls)	39	43	43	43	43	46	46
Sample Date	08/21/00	08/22/00	09/24/03	01/05/04	04/16/04	07/25/05	12/12/06
Sample ID	GWGM-71	GWGM-72	GM-72	GWGM-72	GM-72	GWGM-72A (07/25/05)	GWGM-72A (12/12/06)
2,3-Dimethylphenol	NA	NA	<200	<200	58	<400	510
2,4-Dimethylphenol	<5.0	**2,000**	NA	NA	NA	***4,600***	***3,000***
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	**2,600**	**2,700**	**2,400**	***4,600***	***5,200***
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	<200	<200	<10	<400	<200
2-Methylnaphthalene	20	<50	<100	<100	<5.0	<200	<100
2-Methylphenol	<5.0	**180**	<100	<100	18	**290**	20 J
2-Nitrophenol	<5.0	<50	650	<100	540	<200	<100
3,4-Dimethylphenol	NA	NA	1,700	1,300	1,400	<400	1,600
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	***630***	**340**	**300**	**150**	***1,700***	**52 J**
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA
Anthracene	<5.0	<50	<100	<100	<5.0	<200	<100
Benzo(a)anthracene	0.73 J	<50	<100	<100	<5.0	<200	<100
Benzo(a)pyrene	1.2 J	<50	<100	<100	<5.0	<200	<100
Benzo(b)fluoranthene	1.0 J	<50	<100	<100	<5.0	<200	<100
Benzo(g,h,i)perylene	<5.0	<50	<100	<100	<5.0	<200	<100
Benzo(k)fluoranthene	0.99 J	<50	<100	<100	<5.0	<200	<100
bis(2-Ethylhexyl)phthalate	<5.0	<50	<100	<100	<5.0	<200	24 J
Butylbenzylphthalate	0.75 J	<50	<100	<100	<5.0	<200	<100
Carbazole	<5.0	<50	<100	<100	<5.0	<200	<100
Chrysene	0.95 J	<50	<100	<100	<5.0	<200	<100
Dibenzo(a,h)anthracene	0.94 J	<50	<100	<100	<5.0	<200	<100
Diethylphthalate	<5.0	<50	<100	<100	<5.0	<200	<100
Dimethylphthalate	<5.0	<50	<100	<100	<5.0	<200	<100
Di-n-butylphthalate	<5.0	<50	<100	<100	<5.0	<200	<100
Di-n-octylphthalate	<5.0	<50	<100	<100	<5.0	<200	<100
Fluoranthene	0.64 J	<50	<100	<100	<5.0	<200	<100
Hexachlorobenzene	<5.0	<50	<100	<100	<5.0	<200	<100
Indeno(1,2,3-c,d)pyrene	<5.0	<50	<100	<100	<5.0	<200	<100
Naphthalene	**44**	**40 J**	<100	<100	**35**	**47 J**	**30 J**
Phenanthrene	<5.0	<50	<100	<100	<5.0	<200	<100
Phenol	<5.0	180	<100	<100	<5.0	**720**	<100
Pyrene	0.84 J	<50	<100	<100	<5.0	<200	<100

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-73	GM-74	GM-75	GM-76			GM-77	
Top of Screen Depth (ft bls)	42	34	24	3	3	3	105	105
Sample Date	09/06/00	09/07/00	09/08/00	01/29/01	01/29/01	09/09/05	09/22/03	05/11/04
Sample ID	GWGM-73	GWGM-74	GWGM-75	DUP.012901	GWGM-76	GWGM-76 (9/9/05)	GM-77	GWGM-77 (5/11/04)
2,3-Dimethylphenol	NA	NA	NA	NA	NA	<9.9	<40	<10
2,4-Dimethylphenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	NA	<9.9	340	170
2,5-Dimethylphenol	NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dimethylphenol	NA	NA	NA	NA	NA	<9.9	130	88
2-Methylnaphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
2-Methylphenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
2-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
3,4-Dimethylphenol	NA	NA	NA	NA	NA	<9.9	<40	<10
3-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
4-Methylphenol	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Benzo(a)pyrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Benzo(g,h,i)perylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	<5.0	0.56 J	<5.0	<20	<5.0
Butylbenzylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Carbazole	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Chrysene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Diethylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Dimethylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Di-n-butylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Di-n-octylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Hexachlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Phenanthrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Phenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20	<5.0
Pyrene	<5.0	<5.0	<5.0	<5.0	0.78 J	<5.0	<20	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-77 (continued)	GM-78			
Top of Screen Depth (ft bls)	105	20	20	20	20
Sample Date	07/28/05	09/18/03	04/29/04	07/29/05	07/29/05
Sample ID	GWGM-77 (072805)	GM-78 (9/18/03)	GWGM-78 (4/29/04)	GWGM-78 (7/29/05)	GWGM-998-RE (7/29/05)
2,3-Dimethylphenol	120	<10	<10	<9.9	1.3 J
2,4-Dimethylphenol	310	NA	NA	56	62
2,4-Dimethylphenol/2,5-Dimethylphenol	**670**	40	36	130	120
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	<47	<10	15	<9.9	29
2-Methylnaphthalene	<24	<5.0	<5.0	<5.0	<4.7
2-Methylphenol	<24	<5.0	<5.0	<5.0	<4.7
2-Nitrophenol	<24	<5.0	<5.0	<5.0	<4.7
3,4-Dimethylphenol	<47	<10	<10	<9.9	<9.4
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<24	<5.0	<5.0	<5.0	<4.7
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<24	<5.0	<5.0	<5.0	<4.7
Benzo(a)anthracene	<24	<5.0	<5.0	<5.0	<4.7
Benzo(a)pyrene	<24	<5.0	<5.0	<5.0	<4.7
Benzo(b)fluoranthene	<24	<5.0	<5.0	<5.0	<4.7
Benzo(g,h,i)perylene	<24	<5.0	<5.0	<5.0	<4.7
Benzo(k)fluoranthene	<24	<5.0	<5.0	<5.0	<4.7
bis(2-Ethylhexyl)phthalate	<24	<5.0	<5.0	<5.0	<4.7
Butylbenzylphthalate	<24	<5.0	<5.0	<5.0	<4.7
Carbazole	<24	<5.0	<5.0	<5.0	<4.7
Chrysene	<24	<5.0	<5.0	<5.0	<4.7
Dibenzo(a,h)anthracene	<24	<5.0	<5.0	<5.0	<4.7
Diethylphthalate	<24	<5.0	<5.0	<5.0	0.81 J
Dimethylphthalate	<24	<5.0	<5.0	<5.0	<4.7
Di-n-butylphthalate	<24	<5.0	<5.0	<5.0	<4.7
Di-n-octylphthalate	<24	<5.0	<5.0	<5.0	<4.7
Fluoranthene	<24	<5.0	<5.0	<5.0	<4.7
Hexachlorobenzene	<24	<5.0	<5.0	<5.0	<4.7
Indeno(1,2,3-c,d)pyrene	<24	<5.0	<5.0	<5.0	<4.7
Naphthalene	<24	<5.0	<5.0	<5.0	<4.7
Phenanthrene	<24	<5.0	<5.0	<5.0	<4.7
Phenol	<24	<5.0	<5.0	<5.0	<4.7
Pyrene	<24	<5.0	<5.0	<5.0	<4.7

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-78 (continued)	GM-79			
Top of Screen Depth (ft bls)	20	25	25	25	25
Sample Date	12/08/06	09/18/03	04/26/04	07/29/05	12/04/06
Sample ID	GWGM-78 (12/8/06)	GM-79 (9/18/03)	GWGM-79 (4/26/04)	GWGM-79 (7/29/05)	GWGM-79(12/4/06)
2,3-Dimethylphenol	<10	<10	<10	11	<9.8
2,4-Dimethylphenol	<5.0	NA	NA	29	<4.9 *
2,4-Dimethylphenol/2,5-Dimethylphenol	5.2 J	19	20	58	<9.8
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	5.7 J	11	12	15	1.6 J
2-Methylnaphthalene	<5.0	<5.0	<5.0	<4.9	<4.9
2-Methylphenol	<5.0	<5.0	<5.0	<4.9	<4.9
2-Nitrophenol	<5.0	<5.0	<5.0	<4.9	<4.9
3,4-Dimethylphenol	<10	<10	<10	<9.7	<9.8
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	2.0 J	<4.9	<4.9
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<5.0	<4.9	<4.9
Benzo(a)anthracene	<5.0	<5.0	<5.0	<4.9	<4.9
Benzo(a)pyrene	<5.0	<5.0	<5.0	<4.9	<4.9
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<4.9	<4.9
Benzo(g,h,i)perylene	<5.0	<5.0	<5.0	<4.9	<4.9
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<4.9	<4.9
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Butylbenzylphthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Carbazole	<5.0	<5.0	<5.0	<4.9	<4.9
Chrysene	<5.0	<5.0	<5.0	<4.9	<4.9
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<4.9	<4.9
Diethylphthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Dimethylphthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Di-n-butylphthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Di-n-octylphthalate	<5.0	<5.0	<5.0	<4.9	<4.9
Fluoranthene	<5.0	<5.0	<5.0	<4.9	<4.9
Hexachlorobenzene	<5.0	<5.0	<5.0	<4.9	<4.9
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<5.0	<4.9	<4.9
Naphthalene	<5.0	<5.0	<5.0	<4.9	<4.9
Phenanthrene	<5.0	<5.0	<5.0	<4.9	<4.9
Phenol	<5.0	<5.0	<5.0	<4.9	<4.9
Pyrene	<5.0	<5.0	<5.0	<4.9	<4.9

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-82A		GM-84		
Top of Screen Depth (ft bls)	82	82	77	77	77
Sample Date	06/02/04	06/05/04	08/19/04	12/12/06	08/01/05
Sample ID	GBGWGM-82/95 (6/3/04)	BGWGM-82/114 (6/5/04)	GWGM-84 (8/19/04)-RE	GWGM-84 (12/12/06)	GWGM-84 (08/01/05)
2,3-Dimethylphenol	<10	12	<10	<10	<9.6
2,4-Dimethylphenol	NA	NA	NA	<5.0	<4.8
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	130	<15	<10	<9.6
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	<10	53	<10	<10	<9.6
2-Methylnaphthalene	<5.0	<5.0	<5.0	<5.0	<4.8
2-Methylphenol	<5.0	<5.0	<5.0	<5.0	<4.8
2-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<4.8
3,4-Dimethylphenol	<10	<10	<10	<10	<9.6
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol	<5.0	<5.0	<5.0	<5.0	<4.8
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<5.0	<5.0	<5.0	<5.0	<4.8
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<4.8
Benzo(a)pyrene	<5.0	<5.0	<5.0	<5.0	<4.8
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5.0	<4.8
Benzo(g,h,i)perylene	1.0 J	<5.0	<5.0	<5.0	<4.8
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<4.8
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	<5.0	<4.8
Butylbenzylphthalate	<5.0	<5.0	<5.0	<5.0	<4.8
Carbazole	<5.0	<5.0	<5.0	<5.0	<4.8
Chrysene	<5.0	<5.0	<5.0	<5.0	<4.8
Dibenzo(a,h)anthracene	1.0 J	<5.0	<5.0	<5.0	<4.8
Diethylphthalate	<5.0	<5.0	<5.0	<5.0	<4.8
Dimethylphthalate	<5.0	<5.0	<5.0	<5.0	<4.8
Di-n-butylphthalate	<5.0	1.3 J	<5.0	<5.0	<4.8
Di-n-octylphthalate	<5.0	<5.0	<5.0	<5.0	<4.8
Fluoranthene	<5.0	<5.0	<5.0	<5.0	<4.8
Hexachlorobenzene	<5.0	<5.0	<5.0	<5.0	<4.8
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<5.0	<5.0	<4.8
Naphthalene	<5.0	<5.0	<5.0	<5.0	<4.8
Phenanthrene	<5.0	<5.0	<5.0	<5.0	<4.8
Phenol	<5.0	<5.0	<5.0	<5.0	<4.8
Pyrene	<5.0	<5.0	<5.0	<5.0	<4.8

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GM-87A		GM-87B	GM-118D		GMSB-111[1]
Top of Screen Depth (ft bls)	32	32	117	54	54	--
Sample Date	12/05/06	12/05/06	12/05/06	10/21/98	04/29/99	08/19/03
Sample ID	GWGM-87A (12/5/06)	GWGM-999(12/5/06)	GWGM-87A(12/5/06)	GWGM-118D	GWGM-118D	GBGWGMSB-111/2E
2,3-Dimethylphenol	<10	<10	<10	NA	<10	<10
2,4-Dimethylphenol	13 *	12 *	<5.0 *	<5	<5	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	13	12	<10	NA	NA	<10
2,5-Dimethylphenol	NA	NA	NA	NA	<20	NA
2,6-Dimethylphenol	<10	<10	<10	NA	<10	<10
2-Methylnaphthalene	<5.0	<5.0	<5.0	<5	<5	<5.0
2-Methylphenol	<5.0	<5.0	<5.0	<5	<5	<5.0
2-Nitrophenol	<5.0	<5.0	<5.0	<20	<20	<5.0
3,4-Dimethylphenol	<10	<10	<10	NA	<10	<10
3-Methylphenol	NA	NA	NA	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	<5.0	NA	NA	<5.0
4-Methylphenol	NA	NA	NA	<5	<5	NA
Anthracene	<5.0	<5.0	<5.0	<5	<5	<5.0
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5	<5	<5.0
Benzo(a)pyrene	<5.0	<5.0	<5.0	<5	<5	<5.0
Benzo(b)fluoranthene	<5.0	<5.0	<5.0	<5	<5	<5.0
Benzo(g,h,i)perylene	<5.0	<5.0	<5.0	<5	<5	<5.0
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5	<5	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Butylbenzylphthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Carbazole	<5.0	<5.0	<5.0	<5	<5 J	<5.0
Chrysene	<5.0	<5.0	<5.0	<5	<5	<5.0
Dibenzo(a,h)anthracene	<5.0	<5.0	<5.0	<5	<5	<5.0
Diethylphthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Dimethylphthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Di-n-butylphthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Di-n-octylphthalate	<5.0	<5.0	<5.0	<5	<5	<5.0
Fluoranthene	<5.0	<5.0	<5.0	<5	<5	<5.0
Hexachlorobenzene	<5.0	<5.0	<5.0	<5	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<5.0	<5	<5	<5.0
Naphthalene	<5.0	<5.0	<5.0	<10	<10	<5.0
Phenanthrene	<5.0	<5.0	<5.0	<5	<5	<5.0
Phenol	<5.0	<5.0	<5.0	<5	<5	<5.0
Pyrene	<5.0	<5.0	<5.0	<5	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-112[1]		GMSB-113[1]		
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	09/03/03	09/03/03	09/05/03	09/05/03	09/04/03
Sample ID	GBGWGMSB-112/134	GBGWGMSB-112/192	GBGWGMSB-113/155	GBGWGMSB-113/199	GBGWGMSB-113/27
2,3-Dimethylphenol	<100	<10	<100	<10	<10
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	1,400	<10	1,000	<10	<10
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	<100	<10	350	<10	<10
2-Methylnaphthalene	<50	<5.0	<50	<5.0	<5.0
2-Methylphenol	<50	<5.0	<50	<5.0	<5.0
2-Nitrophenol	<50	<5.0	<50	<5.0	<5.0
3,4-Dimethylphenol	500	<10	<100	<10	<10
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<50	<5.0	<50	<5.0	<5.0
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<50	<5.0	<50	<5.0	<5.0
Benzo(a)anthracene	<50	<5.0	<50	<5.0	<5.0
Benzo(a)pyrene	<50	<5.0	<50	<5.0	<5.0
Benzo(b)fluoranthene	<50	5.7	<50	<5.0	<5.0
Benzo(g,h,i)perylene	<50	<5.0	<50	<5.0	<5.0
Benzo(k)fluoranthene	<50	<5.0	<50	<5.0	<5.0
bis(2-Ethylhexyl)phthalate	<50	<5.0	<50	<5.0	<5.0
Butylbenzylphthalate	<50	<5.0	<50	<5.0	<5.0
Carbazole	<50	<5.0	<50	<5.0	<5.0
Chrysene	<50	<5.0	<50	<5.0	<5.0
Dibenzo(a,h)anthracene	<50	<5.0	<50	<5.0	<5.0
Diethylphthalate	<50	<5.0	<50	<5.0	<5.0
Dimethylphthalate	<50	<5.0	<50	<5.0	<5.0
Di-n-butylphthalate	<50	<5.0	<50	<5.0	<5.0
Di-n-octylphthalate	<50	7.1	<50	<5.0	<5.0
Fluoranthene	<50	<5.0	<50	<5.0	<5.0
Hexachlorobenzene	<50	<5.0	<50	<5.0	<5.0
Indeno(1,2,3-c,d)pyrene	57	6.6	68	<5.0	6.2
Naphthalene	<50	<5.0	<50	<5.0	<5.0
Phenanthrene	<50	<5.0	<50	<5.0	<5.0
Phenol	<50	<5.0	<50	<5.0	<5.0
Pyrene	<50	<5.0	<50	<5.0	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-116[1]		GMSB-117[1]		GMSB-118[1]
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/12/03	08/11/03	08/14/03	08/15/03	08/16/03
Sample ID	GBGWGMSB-116/122	GBGWGMSB-116/32	GBGWGMSB-117/115	GBGWGMSB-117/154	GBGWGMSB-118/25
2,3-Dimethylphenol	<100	<10	<40	<50	<100
2,4-Dimethylphenol	NA	NA	NA	NA	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	460	<10	340	940	300
2,5-Dimethylphenol	NA	NA	NA	NA	NA
2,6-Dimethylphenol	150	<10	120	<50	<100
2-Methylnaphthalene	<50	<5.0	<20	<25	<50
2-Methylphenol	<50	<5.0	<20	<25	<50
2-Nitrophenol	<50	<5.0	<20	<25	<50
3,4-Dimethylphenol	<100	<10	<40	<50	<100
3-Methylphenol	NA	NA	NA	NA	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<50	<5.0	<20	<25	<50
4-Methylphenol	NA	NA	NA	NA	NA
Anthracene	<50	<5.0	<20	<25	<50
Benzo(a)anthracene	<50	<5.0	<20	<25	<50
Benzo(a)pyrene	<50	<5.0	<20	<25	<50
Benzo(b)fluoranthene	<50	<5.0	<20	<25	<50
Benzo(g,h,i)perylene	<50	<5.0	<20	<25	<50
Benzo(k)fluoranthene	<50	<5.0	<20	<25	<50
bis(2-Ethylhexyl)phthalate	<50	5	20	28	<50
Butylbenzylphthalate	<50	8.3	<20	<25	<50
Carbazole	<50	<5.0	<20	<25	<50
Chrysene	<50	<5.0	<20	<25	<50
Dibenzo(a,h)anthracene	<50	<5.0	<20	<25	<50
Diethylphthalate	<50	<5.0	<20	<25	<50
Dimethylphthalate	<50	<5.0	<20	<25	<50
Di-n-butylphthalate	<50	<5.0	<20	<25	70
Di-n-octylphthalate	<50	<5.0	<20	<25	<50
Fluoranthene	<50	<5.0	<20	<25	<50
Hexachlorobenzene	<50	<5.0	<20	<25	<50
Indeno(1,2,3-c,d)pyrene	<50	<5.0	<20	<25	<50
Naphthalene	<50	<5.0	<20	<25	<50
Phenanthrene	<50	<5.0	<20	<25	<50
Phenol	<50	<5.0	<20	<25	<50
Pyrene	<50	<5.0	<20	<25	<50

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	GMSB-119[1]		GMSB-122[1]	GMSB-123[1]	Grailer
Top of Screen Depth (ft bls)	--	--	--	--	--
Sample Date	08/18/03	08/17/03	09/08/03	09/09/03	05/12/99
Sample ID	GBGWGMSB-119/12	GBGWGMSB-119/45	GBGWGMSB-122/145	GBGWGMSB-123/150	GBGW-53C
2,3-Dimethylphenol	<10	<10	<200	290	<11
2,4-Dimethylphenol	NA	NA	NA	NA	<5.4
2,4-Dimethylphenol/2,5-Dimethylphenol	48	<10	2,200	810	NA
2,5-Dimethylphenol	NA	NA	NA	NA	<22
2,6-Dimethylphenol	<10	<10	570	300	<11
2-Methylnaphthalene	<5.0	<5.0	<100	<50	<5.4
2-Methylphenol	<5.0	<5.0	410	<50	<5.4
2-Nitrophenol	<5.0	<5.0	<100	<50	<20
3,4-Dimethylphenol	<10	<10	200	<100	<11
3-Methylphenol	NA	NA	NA	NA	<11
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	<5.0	2,300	<50	NA
4-Methylphenol	NA	NA	NA	NA	<5.4
Anthracene	<5.0	<5.0	<100	<50	<5.4
Benzo(a)anthracene	<5.0	<5.0	<100	<50	<5.4
Benzo(a)pyrene	<5.0	<5.0	<100	<50	<5.4
Benzo(b)fluoranthene	<5.0	<5.0	<100	<50	<5.4
Benzo(g,h,i)perylene	<5.0	<5.0	<100	<50	<5.4
Benzo(k)fluoranthene	<5.0	<5.0	<100	<50	<5.4
bis(2-Ethylhexyl)phthalate	<5.0	6.2	<100	<50	<5.4
Butylbenzylphthalate	<5.0	7.9	<100	<50	<5.4
Carbazole	<5.0	<5.0	<100	<50	<5.4 J
Chrysene	<5.0	<5.0	<100	<50	<5.4
Dibenzo(a,h)anthracene	<5.0	<5.0	<100	<50	<5.4
Diethylphthalate	<5.0	<5.0	<100	<50	<5.4
Dimethylphthalate	<5.0	<5.0	<100	<50	<5.4
Di-n-butylphthalate	<5.0	7.1	<100	<50	<5.4
Di-n-octylphthalate	<5.0	<5.0	<100	<50	<5.4
Fluoranthene	<5.0	<5.0	<100	<50	<5.4
Hexachlorobenzene	<5.0	<5.0	<100	<50	<5.4
Indeno(1,2,3-c,d)pyrene	<5.0	<5.0	<100	<50	<5.4
Naphthalene	<5.0	<5.0	<100	<50	<11
Phenanthrene	<5.0	<5.0	<100	<50	<5.4
Phenol	<5.0	<5.0	350	<50	<5.4
Pyrene	<5.0	<5.0	<100	<50	<5.4

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Grailer (continued)	Hambel		Krans		Michaud	
Top of Screen Depth (ft bls)	--	--	--	--	--	--	--
Sample Date	08/07/03	05/01/99	08/06/03	05/01/99	08/06/03	05/01/99	08/06/03
Sample ID	GBGW-53C	GBGW-101C	GBGW-101C	GBGW-101F	GBGW-101F	GBGW-101G	GBGW-101G
2,3-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
2,4-Dimethylphenol	NA	<5	NA	<5	NA	<5	NA
2,4-Dimethylphenol/2,5-Dimethylphenol	<10	NA	<10	NA	<10	NA	<10
2,5-Dimethylphenol	NA	<20	NA	<20	NA	<20	NA
2,6-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
2-Methylnaphthalene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
2-Methylphenol	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
2-Nitrophenol	<5.0	<20	<5.0	<20	<5.0	<20	<5.0
3,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10
3-Methylphenol	NA	<10	NA	<10	NA	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	<5.0	NA	<5.0	NA	<5.0	NA	<5.0
4-Methylphenol	NA	<5	NA	<5	NA	<5	NA
Anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(a)anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(a)pyrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(b)fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(g,h,i)perylene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Benzo(k)fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
bis(2-Ethylhexyl)phthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Butylbenzylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Carbazole	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Chrysene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Dibenzo(a,h)anthracene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Diethylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Dimethylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Di-n-butylphthalate	<5.0	<5	6.9	<5	<5.0	<5	<5.0
Di-n-octylphthalate	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Fluoranthene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Hexachlorobenzene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Indeno(1,2,3-c,d)pyrene	<5.0	<5 J	<5.0	<5 J	<5.0	<5	<5.0
Naphthalene	<5.0	<10	<5.0	<10	<5.0	<10	<5.0
Phenanthrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Phenol	<5.0	<5	<5.0	<5	<5.0	<5	<5.0
Pyrene	<5.0	<5	<5.0	<5	<5.0	<5	<5.0

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	Schnieder		MPMW-4	MW-1B	MW-2B	MW-5	
Top of Screen Depth (ft bls)	--	--	--	86	102	83	83
Sample Date	05/03/99	08/07/03	02/26/02	06/27/97	06/28/97	10/22/98	04/30/99
Sample ID	GBGW-113	GBGW-113	GWMPMW-4 (2/26/02)	GWMW-1B	GWMW-2B	GWMW-5	GWMW-5
2,3-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
2,4-Dimethylphenol	<5	NA	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	<10	<5.0	NA	NA	NA	NA
2,5-Dimethylphenol	<20	NA	NA	NA	NA	NA	<20
2,6-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
2-Methylnaphthalene	<5	<5.0	<5.0	<5	<5	<5	<5
2-Methylphenol	<5	<5.0	<5.0	<5	<5	<5	<5
2-Nitrophenol	<20	<5.0	<5.0	<5	<5	<20	<20
3,4-Dimethylphenol	<10	<10	<10	NA	NA	NA	<10
3-Methylphenol	<10	NA	NA	NA	NA	<10	<10
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	<5.0	<5.0	NA	NA	NA	NA
4-Methylphenol	<5	NA	NA	<5	<5	<5	<5
Anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(a)pyrene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(b)fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(g,h,i)perylene	<5	<5.0	<5.0	<5	<5	<5	<5
Benzo(k)fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<5	<5.0	0.61 J	<5	1.2 J	<5	<5
Butylbenzylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Carbazole	<5	<5.0	<5.0	<10	<10	<5	<5 J
Chrysene	<5	<5.0	<5.0	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<5	<5.0	<5.0	<5	<5	<5	<5
Diethylphthalate	<5	<5.0	0.51 J	<5	<5	<5	<5
Dimethylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Di-n-butylphthalate	<5	<5.0	0.57 J	<5	<5	**15**	<5
Di-n-octylphthalate	<5	<5.0	<5.0	<5	<5	<5	<5
Fluoranthene	<5	<5.0	<5.0	<5	<5	<5	<5
Hexachlorobenzene	<5	<5.0	<5.0	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<5	<5.0	<5.0	<5	<5	<5	<5
Naphthalene	<10	<5.0	<5.0	<5	<5	<10	<10
Phenanthrene	<5	<5.0	<5.0	<5	<5	<5	<5
Phenol	<5	<5.0	<5.0	<5	1.7 J	<5	<5
Pyrene	<5	<5.0	<5.0	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	MW-8					MW-9A	UG-2		UG-4
Top of Screen Depth (ft bls)	133	133	133	133	133	57	48	48	103
Sample Date	06/29/97	06/29/97	10/24/98	05/03/99	05/12/04	07/02/97	10/27/98	05/03/99	10/13/97
Sample ID	GWGM-99	GWMW-8	GWMW-8	GWMW-8	GWMW-8 (5/12/04)-RE	GWMW-9A	GWUG-2	GWUG-2	GM-79
2,3-Dimethylphenol	NA	NA	NA	<100	180	NA	NA	<10	NA
2,4-Dimethylphenol	**790**	**720**	**730 J**	**610**	NA	<5	<5	<5	<5
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	**430**	NA	NA	NA	NA
2,5-Dimethylphenol	NA	NA	NA	<200	NA	NA	NA	<20	NA
2,6-Dimethylphenol	NA	NA	NA	310	170	NA	NA	<10	NA
2-Methylnaphthalene	<62	<62	<25	<50	<50	<5	<5	<5	<5
2-Methylphenol	49 J	46 J	36 J	<50	18 J	<5	<5	<5	<5
2-Nitrophenol	<62	<62	<50	<100	<50	<5	<20	<20	<5
3,4-Dimethylphenol	NA	NA	NA	140	<100	NA	NA	<10	NA
3-Methylphenol	NA	NA	<50	<100	NA	NA	<10	<10	NA
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	**62**	NA	NA	NA	NA
4-Methylphenol	<62	<62	<25	<50	NA	<5	<5	<5	<5
Anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(a)anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(a)pyrene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(b)fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(g,h,i)perylene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Benzo(k)fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
bis(2-Ethylhexyl)phthalate	<62	87	<25	<50	<50	7.3	<5	13	<5
Butylbenzylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Carbazole	<120	<120	<25	<50	<50	<10	<5	<5	<10
Chrysene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Dibenzo(a,h)anthracene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Diethylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Dimethylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Di-n-butylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Di-n-octylphthalate	<62	<62	<25	<50	<50	<5	<5	<5	<5
Fluoranthene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Hexachlorobenzene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Indeno(1,2,3-c,d)pyrene	<62	<62	<25	<50	<50	<5	<5	<5 J	<5
Naphthalene	<62	<62	<50	<100	<50	<5	<10	<10	<5
Phenanthrene	<62	<62	<25	<50	<50	<5	<5	<5	<5
Phenol	<62	<62	<25	<50	<50	<5	<5	<5	<5
Pyrene	<62	<62	<25	<50	<50	<5	<5	<5	<5

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Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

Well/Boring	UG-4 (continued)			UG-6	Residental	Residential	Residential	Final	Final	Groundwater
Top of Screen Depth (ft bls)	103	103	103	236	Direct	Indoor	Drinking	Acute	Chronic	Surface Water
Sample Date	10/13/97	10/23/98	05/02/99	10/21/97	Contact	Air	Water	Value	Value	Interface
Sample ID	UG-4	GWUG-4	GWUG-4	UG-6	Criteria	Criteria	Criteria	Criteria	Criteria	Criteria
2,3-Dimethylphenol	NA	NA	<10	NA	--	--	--	--	--	--
2,4-Dimethylphenol	<5	<5	<5	<5	520,000	NLV	370	2,700	380	380
2,4-Dimethylphenol/2,5-Dimethylphenol	NA	NA	NA	NA	520,000	NLV	370	2,700	380	380
2,5-Dimethylphenol	NA	NA	<20	NA	--	--	--	--	--	--
2,6-Dimethylphenol	NA	NA	<10	NA	6,300	NLV	4.4	--	--	--
2-Methylnaphthalene	<5	<5	<5	<5	25,000 S	ID	260	ID	ID	ID
2-Methylphenol	<5	<5	<5	<5	810,000 J	J,NLV	370 J	1,500	82	71 J
2-Nitrophenol	<5	<20	<20	<5	79,000	NLV	20	ID	ID	ID
3,4-Dimethylphenol	NA	NA	<10	NA	18,000	NLV	10	--	--	--
3-Methylphenol	NA	<10	<10	NA	810,000	J,NLV	370 J	1,271	71	71 J
3-Methylphenol/4-Methylphenol(m&p-cresol)	NA	NA	NA	NA	810,000 J	J,NLV	370 J	450	25	71 J
4-Methylphenol	<5	<5	<5	<5	810,000	J,NLV	370 J	450	25	71 J
Anthracene	<5	<5	<5	<5	43 S	43 S	43 S	ID	ID	ID
Benzo(a)anthracene	<5	<5	<5	<5	9.4 (Q) S,AA	(Q) NLV	2.1 (Q)	ID	ID	(Q) ID
Benzo(a)pyrene	<5	<5	<5	<5	1 (Q) M,AA	(Q) NLV	5 (Q) A	ID	ID	(Q) ID
Benzo(b)fluoranthene	<5	<5	<5	<5	1.5 (Q) S,AA	(Q) ID	1.5 (Q) S, AA	ID	ID	(Q) ID
Benzo(g,h,i)perylene	<5	<5	<5	<5	1 M,AA	NLV	1 M	--	--	--
Benzo(k)fluoranthene	<5	<5	<5	<5	1 (Q) M,AA	(Q) NLV	1 (Q) M	--	--	(Q)
bis(2-Ethylhexyl)phthalate	<5	<5	<5	1.2 J	320 AA	NLV	6 A	285	ID*	32
Butylbenzylphthalate	<5	<5	<5	<5	2,700 S	NLV	1,200	630	67	14 X
Carbazole	<10	<5	<5	<10	7,400	NLV	85	72	4	10 M
Chrysene	<5	<5	<5	<5	1.6 (Q) S,AA	(Q) ID	1.6 (Q) S	ID	ID	(Q) ID
Dibenzo(a,h)anthracene	<5	<5	<5	<5	2 (Q) M,AA	(Q) NLV	2 (Q) M	ID	ID	(Q) ID
Diethylphthalate	<5	<5	<5	<5	1,100,000 S	NLV	5,500	2,000	110	110
Dimethylphthalate	<5	<5	<5	<5	4,200,000 S	NLV	73,000	--	--	--
Di-n-butylphthalate	<5	<5	<5	<5	11,000 S	NLV	880	75	9.7	9.7
Di-n-octylphthalate	<5	<5	<5	<5	400	NLV	130	ID	ID	ID
Fluoranthene	<5	<5	<5	<5	210 S	210 S	210 S	28	1.6	1.6
Hexachlorobenzene	<5	<5	<5	<5	4.6	440	IA	ID	ID	0.2 M
Indeno(1,2,3-c,d)pyrene	<5	<5	<5	<5	2 (Q) AA,M	(Q) NLV	2 (Q) M	ID	ID	(Q) ID
Naphthalene	<5	<10	<10	<5	31,000 S	31,000 S	520	200	13	13
Phenanthrene	<5	<5	<5	<5	1,000 S	1,000 S	52	43	2.4	2.4
Phenol	<5	<5	<5	<5	29,000,000	NLV	4,400	6,800	450	210
Pyrene	<5	<5	<5	<5	140 S	140 S	140 S	ID	ID	ID

Footnotes on Page 56.

Table 4-10. Summary of SVOCs Detected in Groundwater Samples, Ford-Kingsford Products Facility, Kingsford, Michigan.

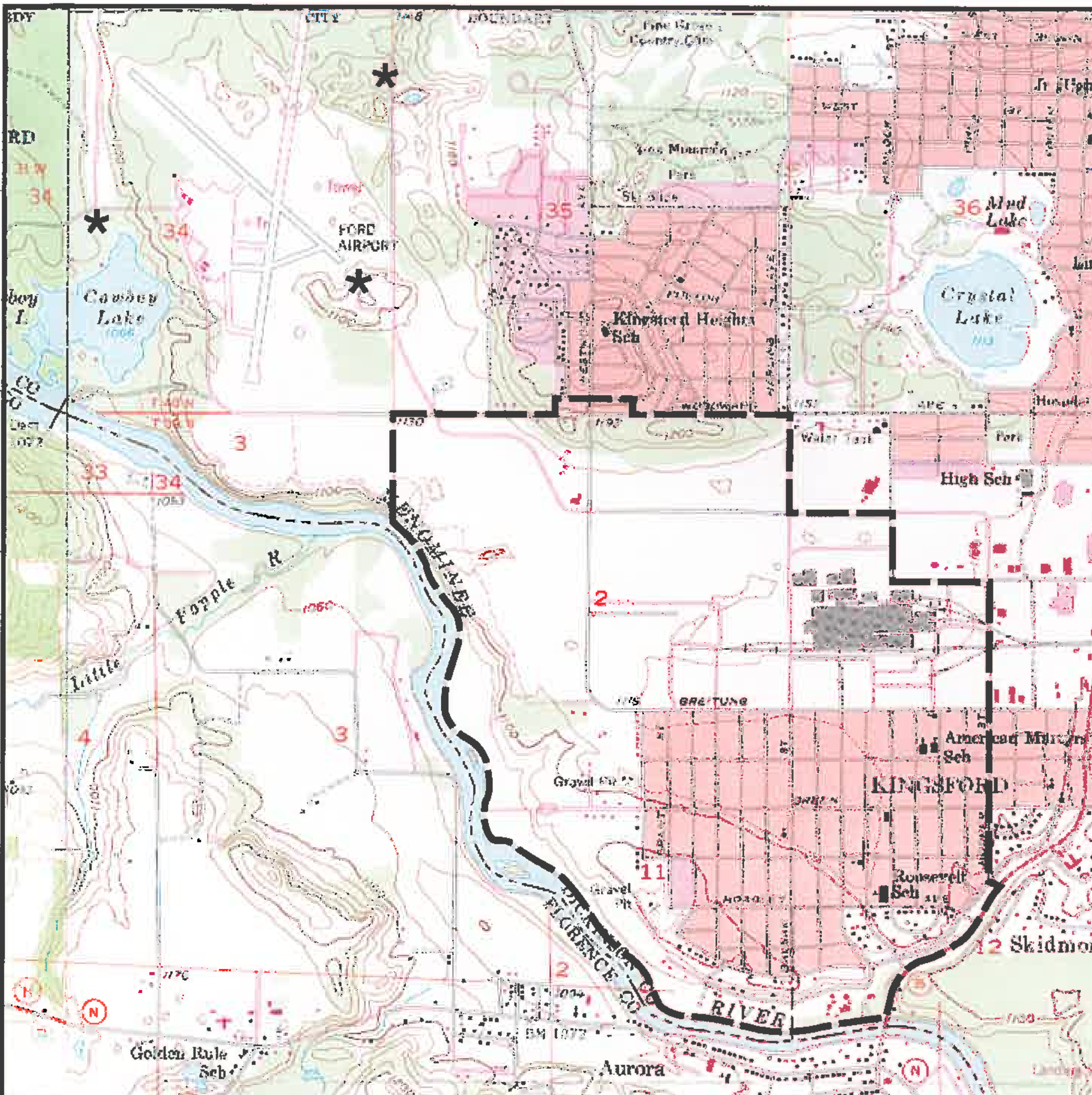
Results reported in micrograms per liter (µg/L).

<	Less than detection limit.
	Indicates a value above the Residential and Commercial I Direct Contact Criteria (Operational Memorandum #1, January 23, 2006).
	Indicates a value above the Residential and Commercial I Drinking Water Protection Criteria (Operational Memorandum #1, January 23, 2006).
--	Not applicable.
*	LCS or LCSD esceeds the control limits.
(I)	Indicates a value above the Residential Indoor Inhalation Criteria (Operational Memorandum #1, January 23, 2006).
(1)	Groundwater samples collected from soil borings were not compared to the Groundwater Surface Water Interface, Final Chronic Value, or Final Acute Value Criteria as these samples were not colleted from a properly constructed well and are not indicative of groundwater conditions.
Underline	Indicates a value above the Groundwater Surface Water Interface Protection Screening Level (Operational Memorandum #1, January 23, 2006).
Bold	Indicates a value above the Final Chronic Value Criteria (Michigan Act 457, Part 4, Rule 57, December 11, 2006).
D	Result was obtained from analysis of a dilution.
E	Analyte was detected at a concentration greater than the calibration range, and is therefore estimated.
Italics	Indicates a value above the Final Acute Value Criteria (Michigan Act 457, Part 4, Rule 57, December 11, 2006).
J	Estimated result.
R	Rejected result.
NA	Not analyzed.
SVOCs	Semi-volatile organic compounds.

Michigan Department of Environmental Quality (MDEQ) Criteria Footnotes:

*	The lowest Human Noncancer Value, Wildlife Value, Human Cancer Value, Final Chronic Value Criteria per Michigan Act 451, Part 4, Rule 57 given for this chemical will adequately protect the uses identified with "ID".
A	State of Michigan Drinking Water Standard.
AA	Compound may be adsorbed to particulates rather than dissolved in water; filtered groundwater sample may be more appropriate for comparison to criteria.
I	Chemical may exhibit the characteristic of ignitability, as defined in 40 CFR 261.21.
ID	Insufficient data.
J	Chemical may be present in several isomer forms. Isomer specific concentrations must be added together for comparison to criteria.
M	Calculated criterion is below the analytical method detection limit (MDL).
NLV	Chemical is not likely to volatilize under most soil conditions.
Q	Criterion for carcinogenic polycyclic aromatic hydrocarbons (PAHs) were developed using "relative potential potencies" (RFPs) to benzo(a)pyrene.
S	Criterion defaults to the chemical-specific water solubility limit.
X	The GSI criterion shown is not protective for surface water that is used as a drinking water source.

DRAFTER: LMB | APPROVED: | CHECKED: MS | DRAWING: SITE_LOC.AI | FILE NO.: GRAPHICS\GW IRAP | PN: FORD\WI0637\CJ2009 | DWG DATE: 28JAN09



SOURCE: USGS 7.5 Minute Topographic Map, IRON MOUNTAIN, MICHIGAN Quadrangle, 1955 Photorevised 1982

N

0 1000 2000 4000

SCALE IN FEET

AREA OF CONCERN

* KINGSFORD CITY WATER SUPPLY WELLS

MICHIGAN

ARCADIS

SITE LOCATION MAP

FORD-KINGSFORD PRODUCTS
KINGSFORD, MICHIGAN

FIGURE

1-1

COWBOY LAKE

FORD AIRPORT

CRYSTAL LAKE

RIVERSIDE DISPOSAL AREA

menominee river AREA

FORMER NORTHEAST PIT

FORMER SOUTHWEST PIT

FORMER PLANT SITE

FORMER WEST BREEN AVENUE DISPOSAL AREA

MENOMINEE RIVER

HISTORIC SEWER

CREEK

LEGEND

- SOIL BORING LOCATION
- GEOPROBE LOCATION
- SOIL VAPOR PROBE LOCATION
- MONITOR WELL AND PIEZOMETER LOCATION
- EXTRACTION WELL LOCATION
- STAFF GAUGE LOCATION
- ABANDONED SOIL VAPOR PROBE LOCATION
- ABANDONED MONITOR WELL, PIEZOMETER, AND EXTRACTION WELL LOCATION
- ABANDONED GEOPROBE LOCATION
- AREA OF CONCERN

N

0 600 1200

SCALE IN FEET

User Name : mseganonen
Acad Version : R18.0s (LMS Tech)

Current Plotstyle : ByColor
Date\Time : Wed, 05 Oct 2011 - 7:44pm

Page Setup: Full size PDF
Pen Table: A-TEST-BLACKGRAY.ctb

Layout Tab: Full Site
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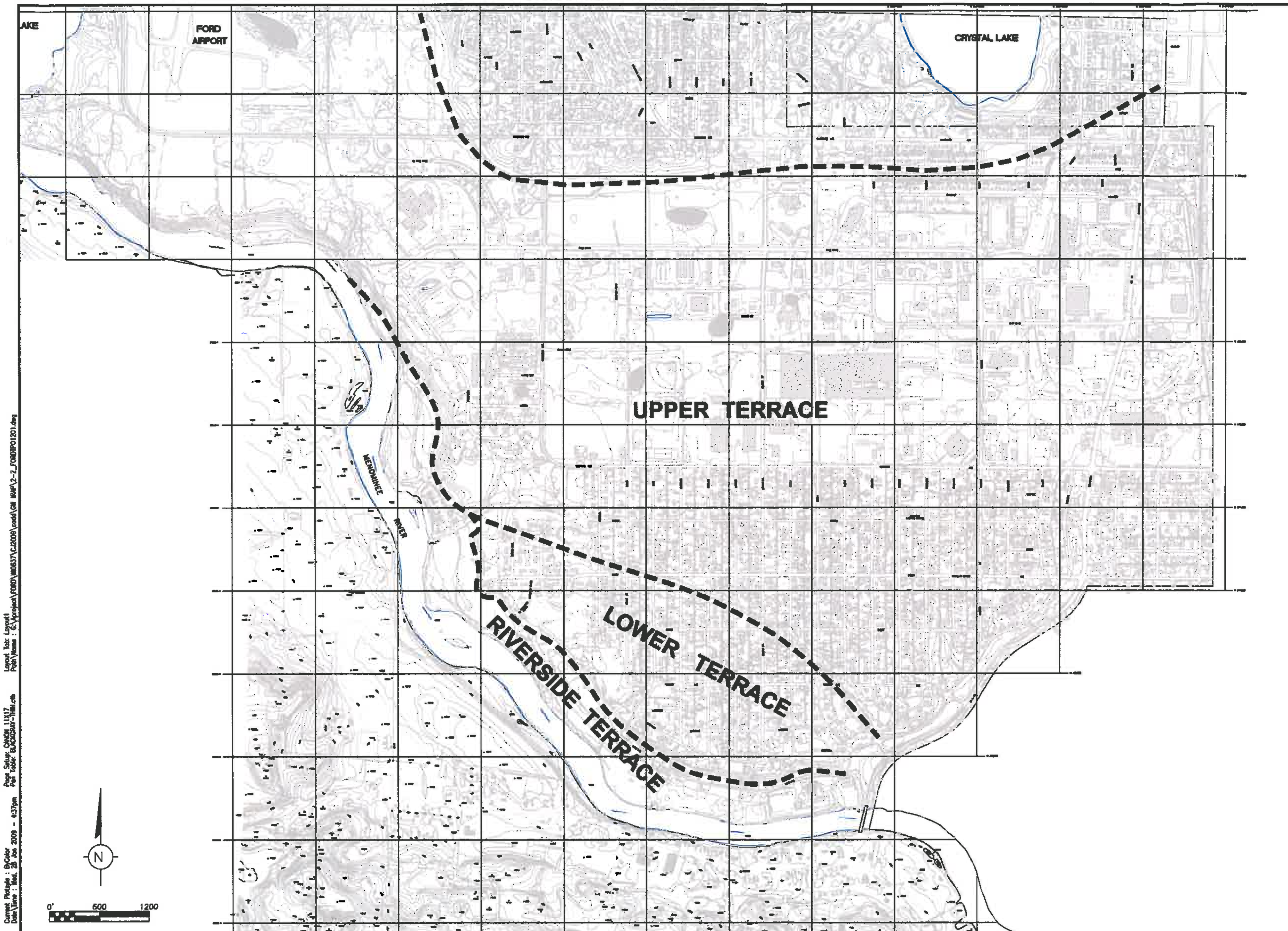
FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
R. STUDEBAKER	M. MAIERLE	B. EVANS	B. EVANS
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SITE DETAILS		0012.00001	C. MCKEOUGH
		PROJECT NUMBER	DRAWING NUMBER
		WI001225	**2-1**



NOTES

1. THIS MAP WAS COMPILED TO MEET NATIONAL MAP ACCURACY STANDARDS FOR FIVE FOOT CONTOUR INTERVAL MAPPING. FIELD CHECKING OF THIS MAP IS RECOMMENDED BEFORE USE. FIVE FOOT CONTOUR INTERVAL BASED ON MEAN SEA LEVEL. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM. DATE OF PHOTOGRAPHY: 05/04/97 ABRAMS AERIAL SURVEY CORPORATION # 26994.2
2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS

TOPOGRAPHIC LEGEND

- FENCE
- ROAD
- BUILDING
- SHORELINE
- UTILITY POLE
- TRAIL OR PATH
- 5-FOOT CONTOUR INTERVAL
- SURVEY SPOT ELEVATION
- TREE OR BUSH
- TERRACE BOUNDARY
- APPROXIMATE LOCATIONS OF KNOWN GLACIAL KETTLES

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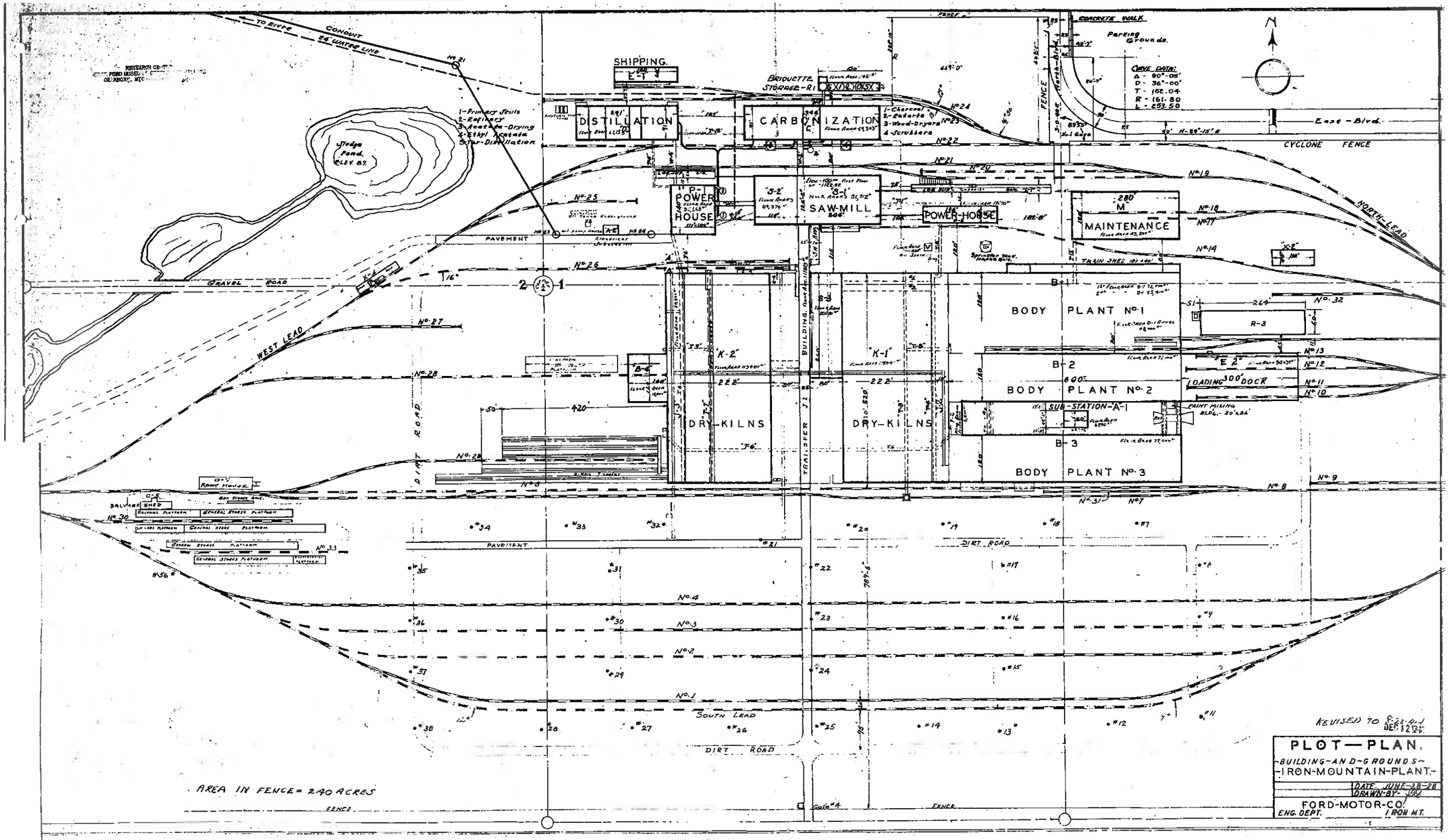
R. STUDEBAKER	M. MAERLE	B. EVANS	B. EVANS
SHEET TITLE		TASK/PHASE NUMBER 0012.00001	DRAWN BY C. MCKEOUGH
SITE TOPOGRAPHY		PROJECT NUMBER WI001225	DRAWING NUMBER 2-2



NOTE: **Figure is a reduced unaltered reproduction of an original print.**

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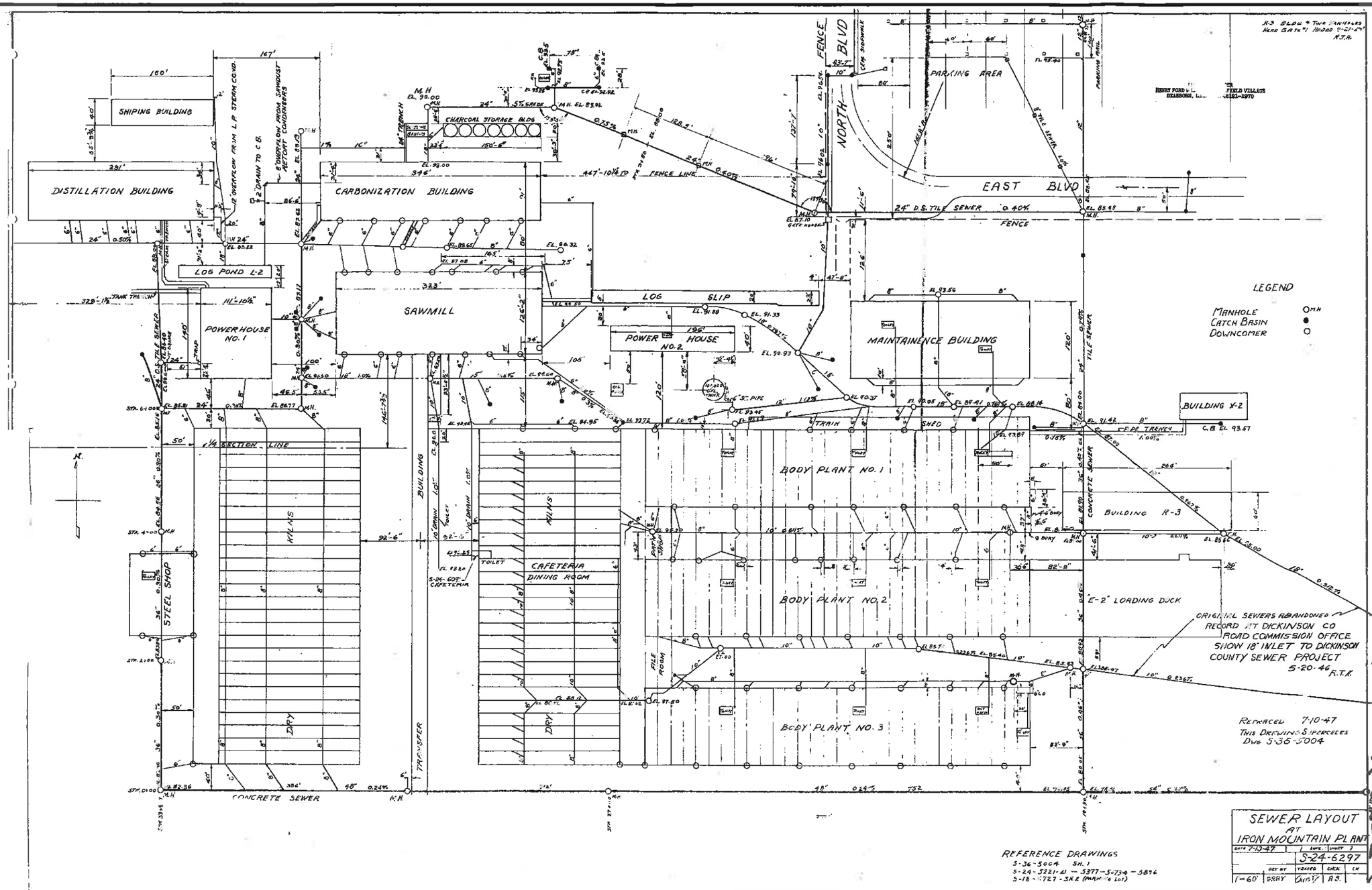
FORMER FORD PLANT
1920'S LAYOUT
FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
2-3

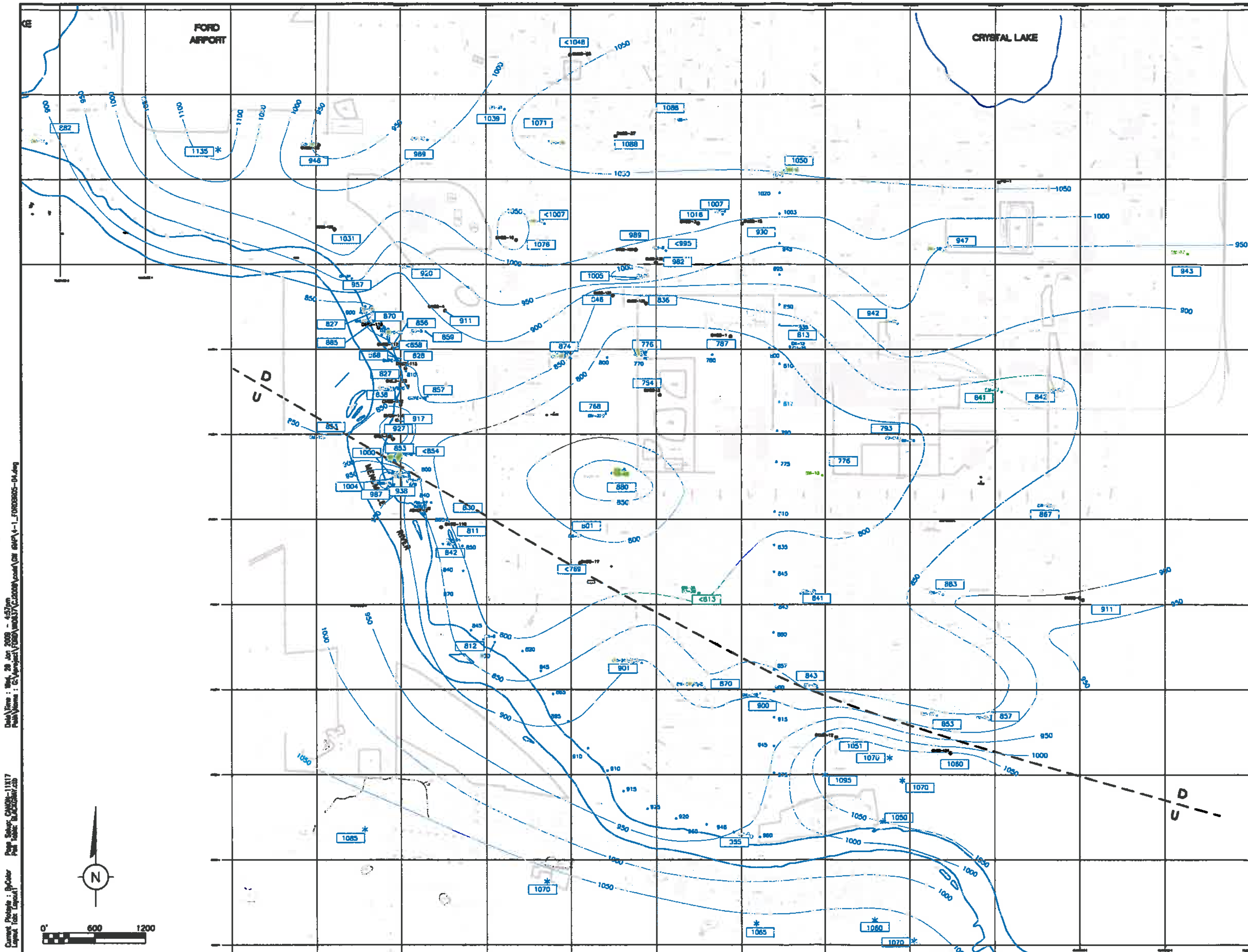


NOTE: Figure is a reduced unaltered reproduction of an original print.

ARCADIS

FORMER FORD PLANT
1940'S LAYOUT
FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
2-4



LEGEND

●	WELL LOCATION
⊘	SOIL BORING LOCATION
946	BEDROCK ELEVATIONS ALONG SEISMIC LINES AT SELECT SHOTPOINTS (ELEVATION IN FEET MSL)
1050	BEDROCK ELEVATION (ELEVATION IN FEET MSL)
850	INFERRED BEDROCK CONTOUR LINE (ELEVATION IN FEET MSL)
1050 *	BEDROCK ELEVATION INFERRED FROM OTHER SOURCES
D / U	BEDROCK FAULT (PER USGS PROFESSIONAL PAPER 513 AND POSITIONED BASED ON STRUCTURAL INFORMATION)

NOTES

1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM.
   DATE OF PHOTOGRAPHY: 05/04/97
   ABRAMS AERIAL SURVEY CORPORATION # 26994.2
2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS

REV. ISSUED DATE DESCRIPTION

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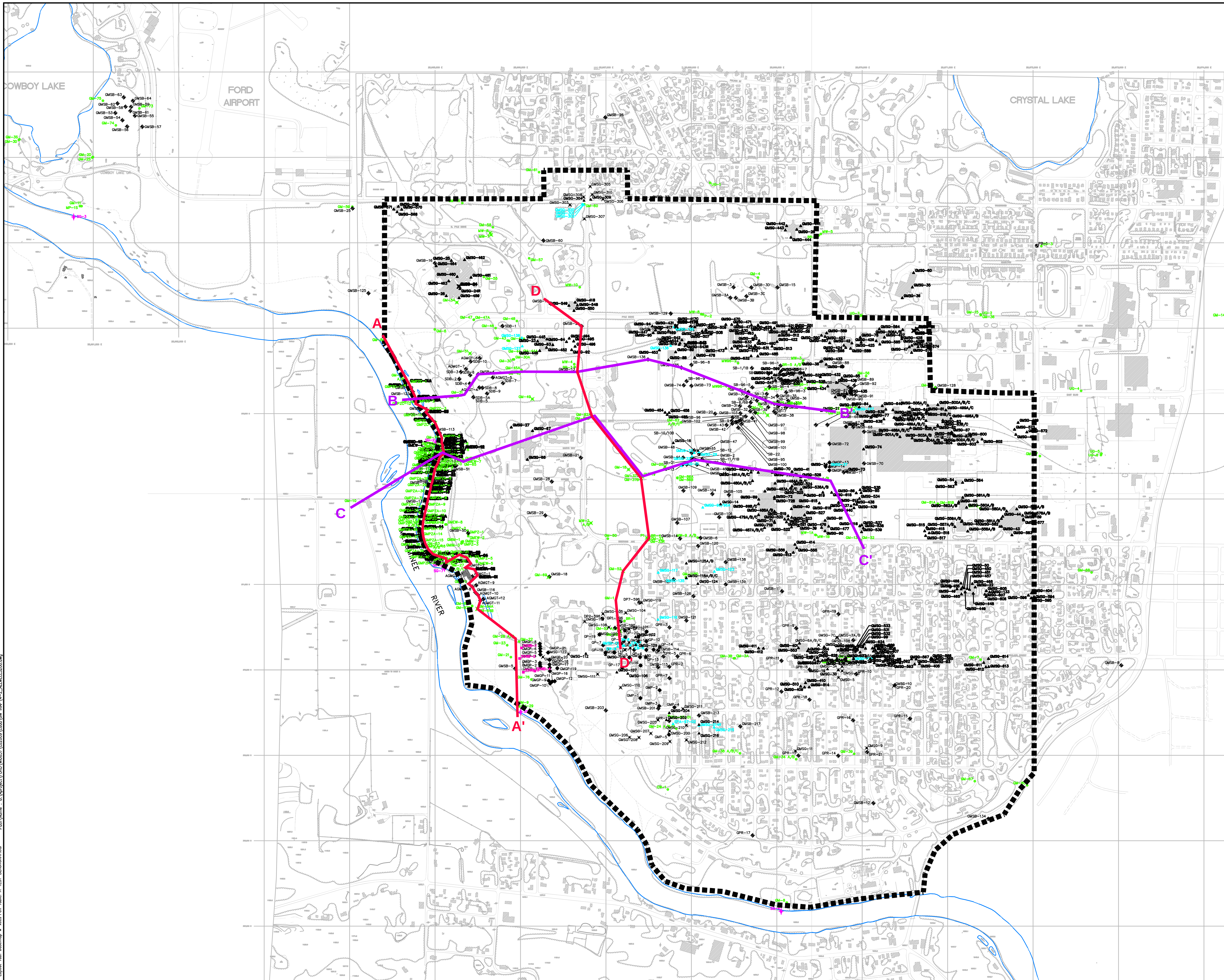
KINGSFORD, MICHIGAN

PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
BEDROCK TOPOGRAPHY		PROJECT NUMBER	DRAWING NUMBER
		W001225	4-1



0' 400 800
SCALE: 1" = 400'

LEGEND

- SOIL BORING LOCATION
- GEOPROBE LOCATION
- SOIL VAPOR PROBE LOCATION
- MONITOR WELL, PIEZOMETER AND EXTRACTION WELL LOCATION
- STAFF GAUGE LOCATION
- AREA OF CONCERN
- A — A' LOCATION OF NORTH–SOUTH GEOLOGIC CROSS SECTION
- B — B' LOCATION OF EAST–WEST GEOLOGIC CROSS SECTION
- C — C' LOCATION OF EAST–WEST GEOLOGIC CROSS SECTION

NOTES:

1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM. DATE OF PHOTOGRAPHY: 05/04/97 (ABRAMS AERIAL SURVEY CORPORATION #26994.2.

2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS.

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R. STUDEBAKER	M. MAIERLE	B. EVANS	B. EVANS
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
		0012.00001	C. MCKEOUGH
CROSS SECTION LOCATION MAP		PROJECT NUMBER	DRAWING NUMBER
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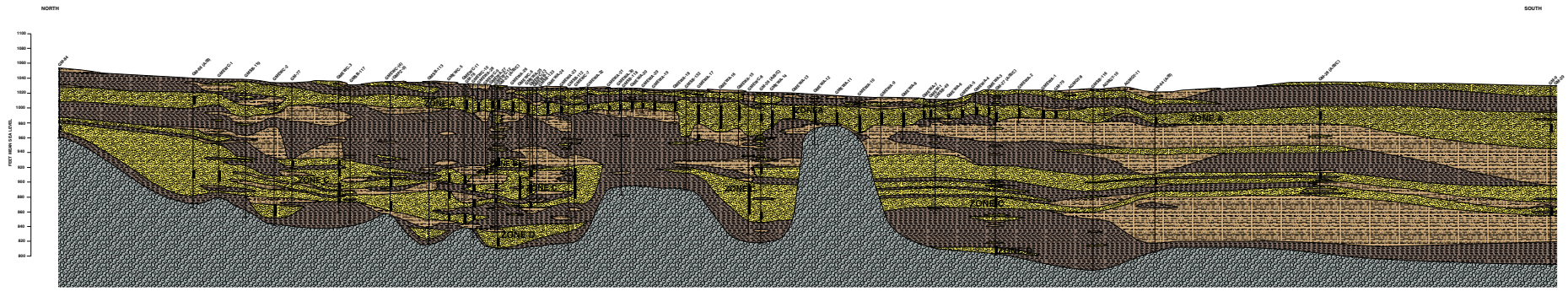

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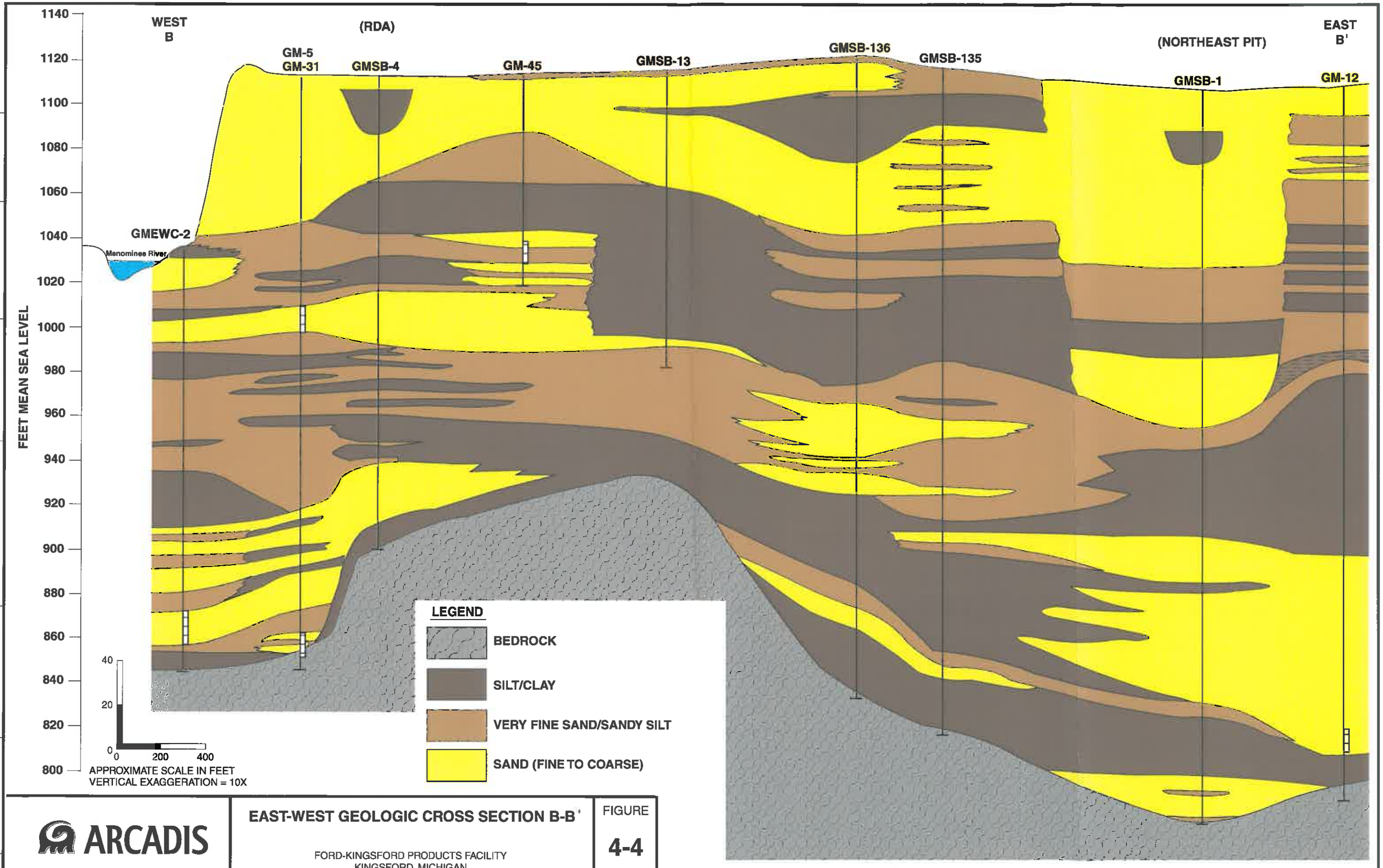
GEOLOGIC CROSS SECTION ALONG THE MENOMINEE RIVER

FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
4-3

DRAFTER: LMB
APPROVED:
CHECKED: MS
DRAWING: EW XSEC.AI
FILE NO.: GRAPHICS\GW IRAP
PN: FORDIWI06371CJ2009
DWG DATE: 28JAN09

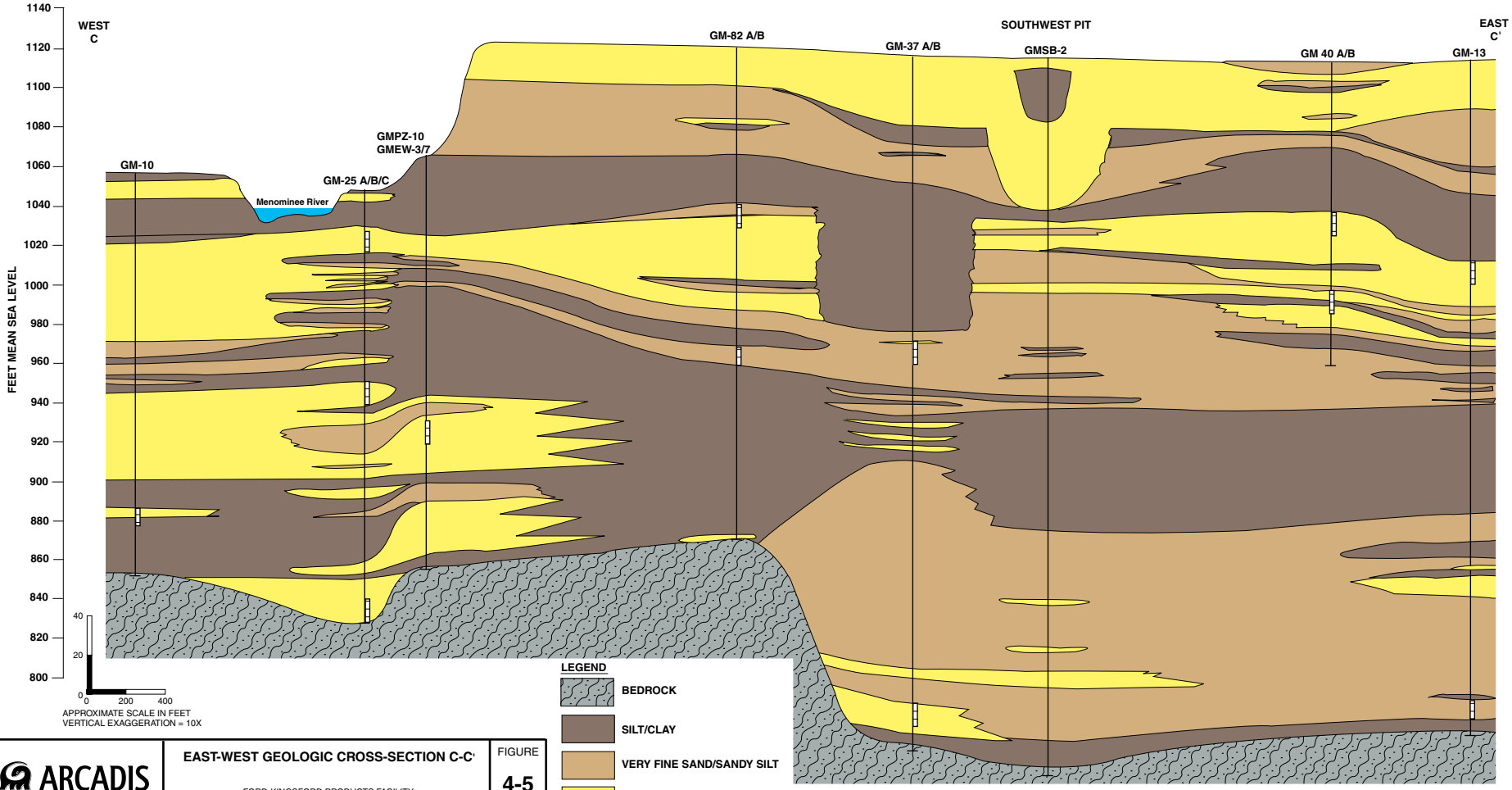


ARCADIS

EAST-WEST GEOLOGIC CROSS SECTION B-B'

FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
4-4



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EAST-WEST GEOLOGIC CROSS-SECTION C-C'

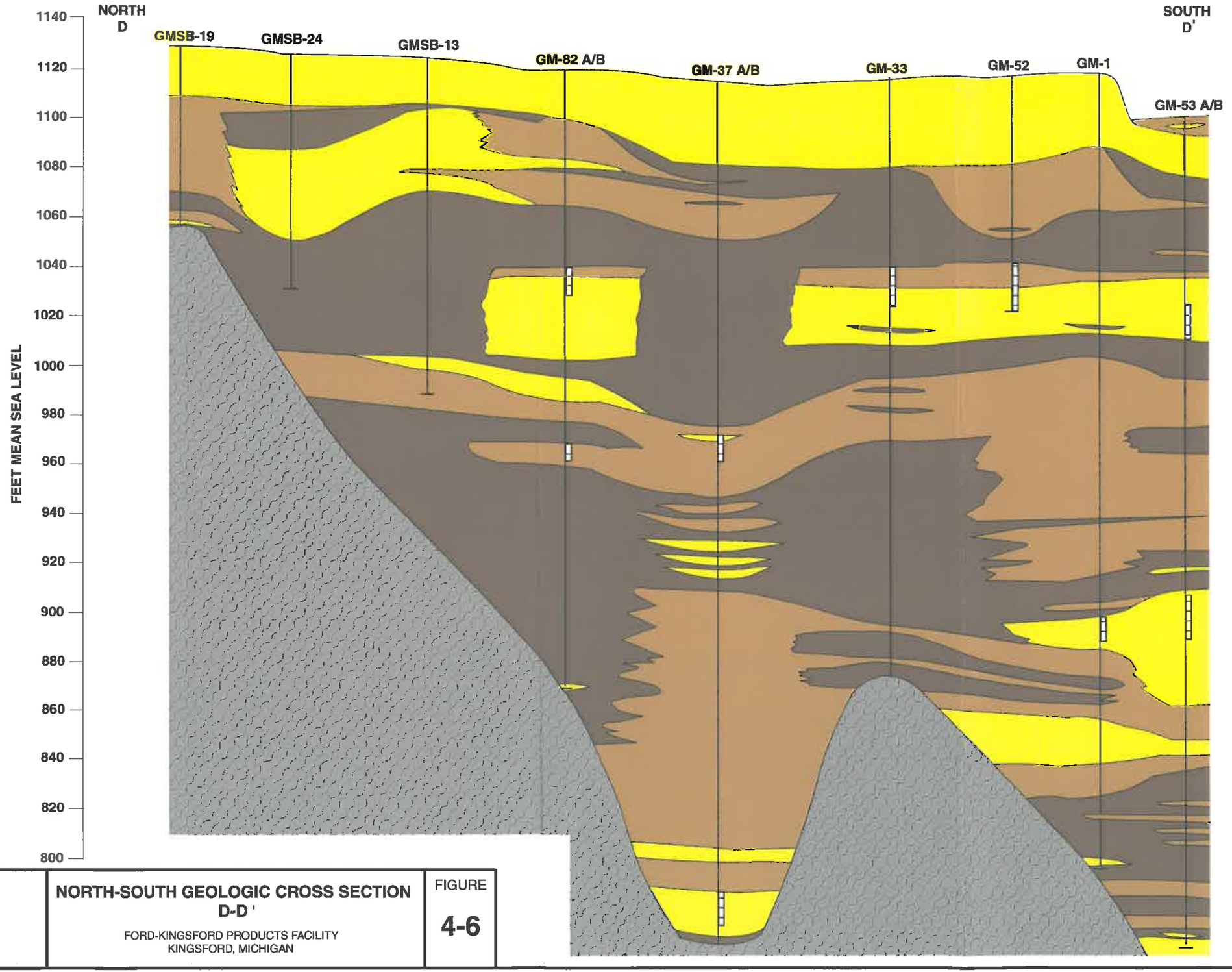
FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
4-5

DRAFTER: LMB
APPROVED:
CHECKED: MS
DRAWING: NS XSEC.AI
PN: FORDWI0637CJ2009
FILE NO.: GRAPHICS\GW IRAP
DWG DATE: 28JAN09

LEGEND

- BEDROCK
- SILT/CLAY
- VERY FINE SAND/ SANDY SILT
- SAND (FINE TO COARSE)



40
20
0
0 200 400
APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 10X

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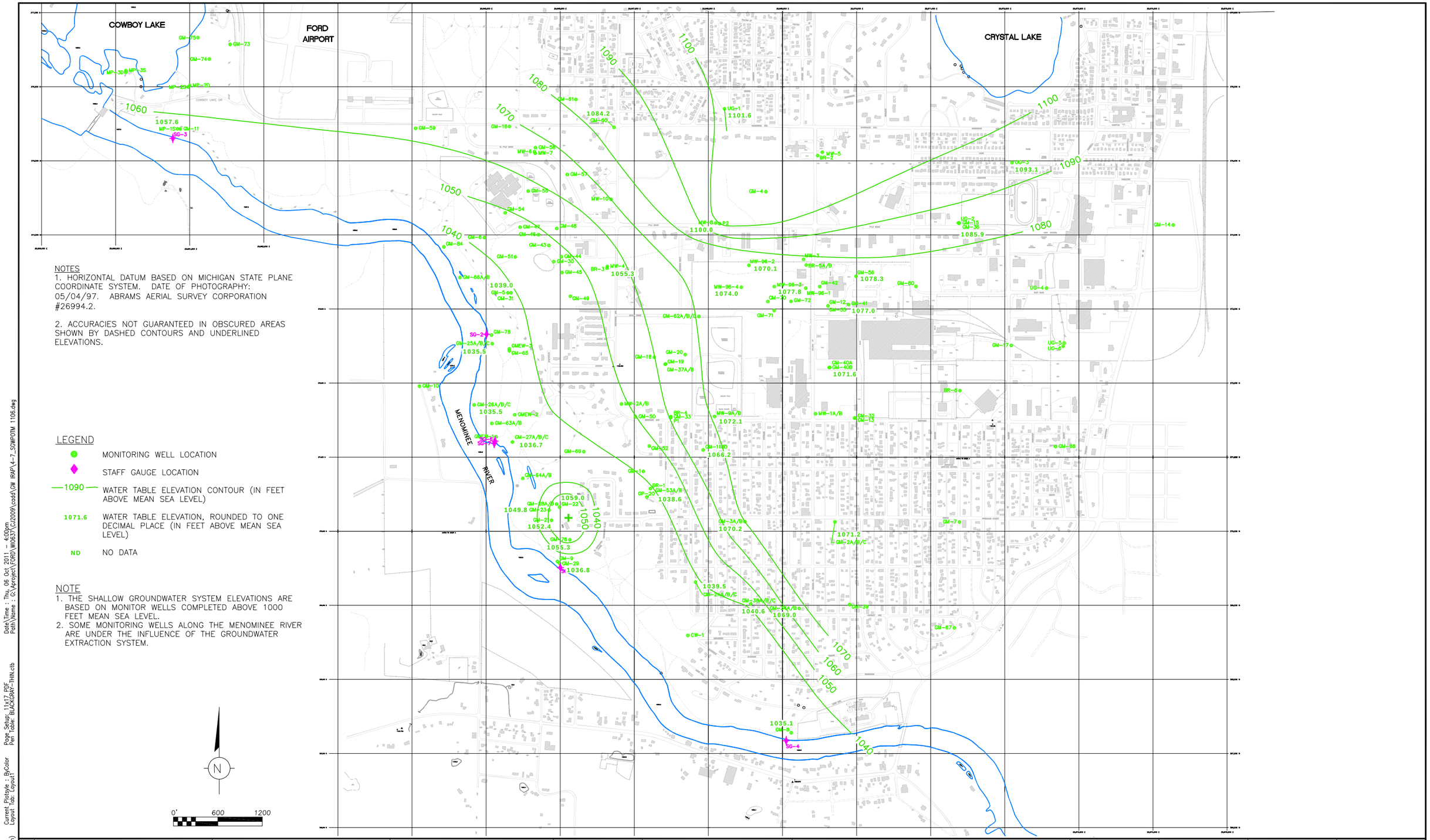
NORTH-SOUTH GEOLOGIC CROSS SECTION
D-D '

FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

FIGURE
4-6



NOTES
1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM. DATE OF PHOTOGRAPHY: 05/04/97. ABRAMS AERIAL SURVEY CORPORATION #26994.2.

2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS.

LEGEND

- MONITORING WELL LOCATION
- STAFF GAUGE LOCATION
- 1090 — WATER TABLE ELEVATION CONTOUR (IN FEET ABOVE MEAN SEA LEVEL)
- 1071.6 — WATER TABLE ELEVATION, ROUNDED TO ONE DECIMAL PLACE (IN FEET ABOVE MEAN SEA LEVEL)
- ND — NO DATA

NOTE
1. THE SHALLOW GROUNDWATER SYSTEM ELEVATIONS ARE BASED ON MONITOR WELLS COMPLETED ABOVE 1000 FEET MEAN SEA LEVEL.
2. SOME MONITORING WELLS ALONG THE MENOMINEE RIVER ARE UNDER THE INFLUENCE OF THE GROUNDWATER EXTRACTION SYSTEM.

N

0' 600 1200

REV.	ISSUED DATE	DESCRIPTION

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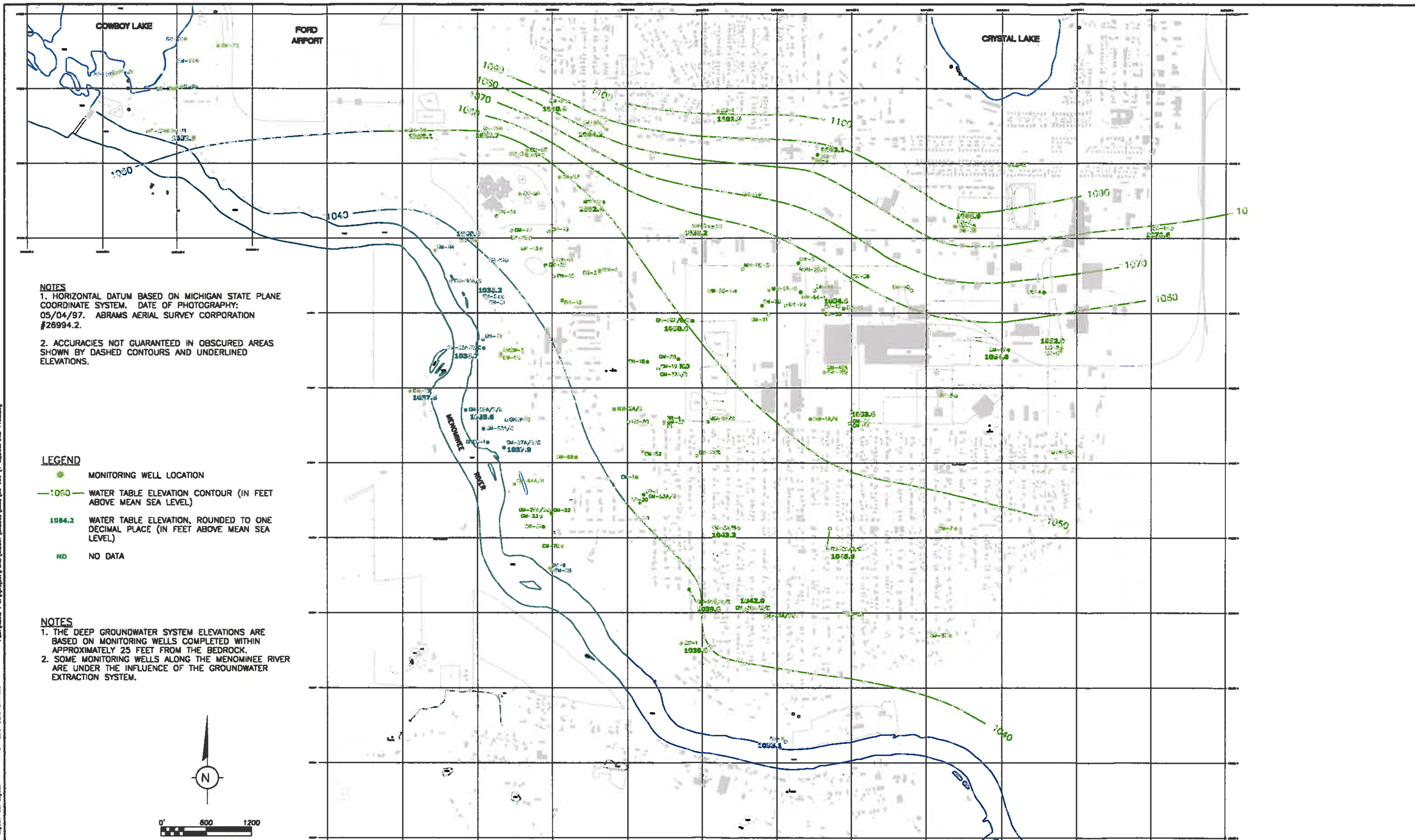
PROJECT MANAGER	DEPARTMENT MANAGER	LEAD DESIGN PROF.	CHECKED BY
R. STUDEBAKER	M. MAIERLE	B. EVANS	B. EVANS
SHEET TITLE		TASK/PHASE NUMBER	DRAWN BY
SHALLOW GROUNDWATER SYSTEM POTENTIOMETRIC SURFACE MAP NOVEMBER 2006		0012.00001	C. MCKEOUGH
		PROJECT NUMBER	FIGURE NUMBER
		WI001125	4–7



NOTES
1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM. DATE OF PHOTOGRAPHY: 05/04/97. ABRAMS AERIAL SURVEY CORPORATION #26994.2.

2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS.

LEGEND

●	MONITORING WELL LOCATION
—1060—	WATER TABLE ELEVATION CONTOUR (IN FEET ABOVE MEAN SEA LEVEL)
1084.2	WATER TABLE ELEVATION, ROUNDED TO ONE DECIMAL PLACE (IN FEET ABOVE MEAN SEA LEVEL)
ND	NO DATA

NOTES
1. THE DEEP GROUNDWATER SYSTEM ELEVATIONS ARE BASED ON MONITORING WELLS COMPLETED WITHIN APPROXIMATELY 25 FEET FROM THE BEDROCK.
2. SOME MONITORING WELLS ALONG THE MENOMINEE RIVER ARE UNDER THE INFLUENCE OF THE GROUNDWATER EXTRACTION SYSTEM.

REV. ISSUED DATE DESCRIPTION

KEYPLAN

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KINGSFORD, MICHIGAN

PROJECT MANAGER R. STUDEBAKER	DEPARTMENT MANAGER M. MAERLE	LEAD DESIGN PROF. B. EVANS	CHECKED BY B. EVANS
SHEET TITLE DEEP GROUNDWATER SYSTEM POTENTIOMETRIC SURFACE MAP NOVEMBER 2006		TASK/PHASE NUMBER 0012.00001	DRAWN BY C. MCKEOUGH
		PROJECT NUMBER WI001225	FIGURE NUMBER 4-8

MENOMINEE RIVER

EASTERN LAKE

N

0' 150' 300'

SCALE: 1" = 150'

LEGEND

- MONITOR WELL LOCATION
- EXTRACTION WELL LOCATION
- SOIL BORING LOCATION
- GAS PROBES
- STAFF GAUGE LOCATION
- GEOPROBE LOCATION

NOTES

1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM.
   DATE OF PHOTOGRAPHY: 5-04-97
   ABRAMS AERIAL SURVEY CORPORATION #26994.2
2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS

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MENOMINEE RIVER BASEMAP

DRAWN	DATE	PROJECT MANAGER	DEPARTMENT MANAGER
JMG	04/18/07	R. STUDEBAKER	M. MAIERLE
		LEAD DESIGN PROF. B. EVANS	CHECKED B. EVANS

FORD-KINGSFORD PRODUCTS FACILITY
KINGSFORD, MICHIGAN

PROJECT NUMBER WI01225

FIGURE 4-9

NOTES

1. HORIZONTAL DATUM BASED ON MICHIGAN STATE PLANE COORDINATE SYSTEM.
   DATE OF PHOTOGRAPHY: 05/04/97
   ABRAMS AERIAL SURVEY CORPORATION # 26994.2
2. ACCURACIES NOT GUARANTEED IN OBSCURED AREAS SHOWN BY DASHED CONTOURS AND UNDERLINED ELEVATIONS

LEGEND

- 0.5 MILLIGRAMS PER LITER (mg/L) METHANE CONTOUR
- 0.5 mg/L METHANE CONTOUR DASHED WHERE INFERRED
- AREA OF CONCERN
- (37.3) DISSOLVED METHANE CONCENTRATION (mg/L) IN GROUNDWATER (RESULTS THROUGH NOVEMBER 2006)

N

0' 600 1200

	KEYPLAN	SEAL	ARCADIS 126 North Jefferson Street, Suite 400 Milwaukee, Wisconsin 53202 Tel: 414-276-7742 Fax: 414-276-7603 www.arcadis-us.com	FORD–KINGSFORD PRODUCTS FACILITY KINGSFORD, MICHIGAN	PROJECT MANAGER: R. STUDEBAKER	DEPARTMENT MANAGER: M. MAIERLE	LEAD DESIGN PROF.: B. EVANS
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Appendix A

Water Well Restriction Ordinance

AN ORDINANCE OF THE CITY OF KINGSFORD RESTRICTING WELLS

ORDINANCE NO. _____

AN ORDINANCE PROVIDING FOR THE REGULATION, RESTRICTION, AND ABANDONMENT OF WELLS IN CERTAIN AREAS OF THE CITY.

The City of Kingsford Ordains:

Section 1: PREAMBLE. The purpose of this Ordinance is to provide for the protection of the public health, safety, and welfare in connection with the use of groundwater within certain portions of the City of Kingsford. It has been determined that groundwater within portions of the Restricted Zone (as defined in Section 2(b) below) contains hazardous substances at concentration levels which the Michigan Department of Environmental Quality has determined may be unsafe for consumption and other uses. It is further recognized that protection of residents of the City of Kingsford from consumption and other uses of groundwater containing such hazardous substances will be fostered by the adoption of restrictions in certain areas with regard to the installation and/or use of wells which may influence the movement of groundwater containing such hazardous substances.

Section 2: DEFINITIONS. When used in this Ordinance, the following terms shall have the meanings set forth below:

(a) "Well" means an opening in the surface of the earth for the purpose of removing water through non-mechanical or mechanical means for any purpose other than i) obtaining groundwater as part of a response action consistent with the Michigan Natural Resources and Environmental Protection Act of 1994, as amended, or ii) removal of wastewater from a septic tank.

(b) "Restricted Zone" shall mean an area described as follows:

All that area lying on Sections One (1), Two (2), Eleven (11) and Twelve (12), Town 39 North, Range 31 West, City of Kingsford, County of Dickinson, Michigan, described as the following:

Beginning at a point approximately 353 feet west of the centerline intersection of North Pyle Drive with Woodward Avenue; thence south to the intersection with the Menominee River; thence southeasterly, south, southeasterly, and east meandering along the northerly shoreline of Menominee River until an intersection of the north bank of the Menominee River with the eastside of Balsam Street projected to the Menominee River; thence north along the east of Balsam Street to the southeast corner of the intersection of Balsam Street with Hoadley Avenue; thence east along the southern side of Hoadley Avenue to the southeast corner of the intersection of Hoadley Avenue with Fox Drive; thence northeast along the eastside of Fox Drive to the intersection of Fox Drive with Hooper Street; thence north along the centerline of Hooper Street to the intersection of Hooper Street with East Boulevard; thence west along the centerline of East Boulevard to the intersection of East Boulevard with North Boulevard; thence north along the centerline of North Boulevard to the intersection of North Boulevard with Pyle Drive; thence west along the centerline of Pyle Drive to the intersection of Pyle Drive with Balsam Street; thence north along the centerline of Balsam Street to the intersection of Balsam Street with Woodward Avenue, thence west along the centerline of Woodward Avenue to a point approximately 500 feet east from the intersection of the centerline of Westwood Avenue with Woodward Avenue; thence north approximately 350 feet; thence west approximately 1,000 feet along a line parallel with Woodward Avenue; thence south approximately 350 feet to the centerline of Woodward Avenue; thence west along the centerline of Woodward Avenue to the beginning point.

A map of the "restricted zone" is attached as Figure 1. The area boundaries may be revised by passage of a resolution by the City Council approving a new Figure 1.

Section 3: PROHIBITION OF INSTALLATION AND USE OF WELLS WITHIN RESTRICTED ZONES. No person shall allow, permit, maintain, install, or use, a well on any property in the Restricted Zone. Property and portions of property within the Restricted Zone shall be serviced only by public water supply.

Section 4: WELL ABANDONMENT. A survey of existing wells within the Restricted Zone has been conducted prior to the effective

date of this ordinance by Ford Motor Company and The Kingsford Products Company. Notification to owners of the wells identified in the survey has been given by the City prior to the effective date of this Ordinance. All private wells within the Restricted Zone shall be properly abandoned in accordance with the American Standards for Testing and Materials (ASTM) Standard #D5299-99. Such wells shall be abandoned and closed within six months of the effective date of the provisions of this Ordinance.

Section 5: CITY INSPECTIONS; ENFORCEMENT. When it has been determined that a violation of this Ordinance exists, the City Water Department shall notify by appropriate means the owners and occupants thereof to terminate such use and comply with this Ordinance.

Section 6: Prior to the effective date of this Ordinance, the City shall notify the County Health Department of the groundwater use restrictions contained in this Ordinance.

Section 7: MODIFICATION OR REPEAL OF THIS ORDINANCE; NOTICE TO THE STATE OF MICHIGAN. In the event this Ordinance is considered for modification or repeal, where said modification or repeal will allow the installation or use of groundwater wells in the Restricted Zone, this Ordinance shall not be modified or repealed except upon 30 days' prior written notice to the Michigan Department of Environmental Quality.

Section 8: PENALTY, REMEDIES.

Section 8.1: CIVIL INFRACTION. Any person violating this Ordinance shall be liable for a civil infraction and each day that the violation continues to occur shall be a separate offense.

Section 8.2: INJUNCTIVE RELIEF. The City may further enforce this Ordinance by action seeking injunctive relief in a court of competent jurisdiction. In such an action the City shall be awarded its costs, damages, and actual attorney fees.

Section 8.3: PUBLIC NUISANCE. A violation of this Ordinance is hereby declared to be a public nuisance and shall be abated by immediately taking the well out of service and properly abandoning and closing it. The City may seek abatement of such public nuisance in a court of competent jurisdiction and, in such action, recover its costs, damages, and actual attorney fees.

Section 9: REPEAL; SEVERABILITY. All provisions/sections of any City of Kingsford Ordinances heretofore adopted, inconsistent with the provisions of this Ordinance are hereby repealed. In the event any part of this Ordinance is finally determined to be invalid or unenforceable by a court of competent jurisdiction, then said Determination shall not affect the validity of the remaining provisions. The City shall promptly notify the Michigan Department of Environmental Quality upon the occurrence of any event described in the preceding sentence.

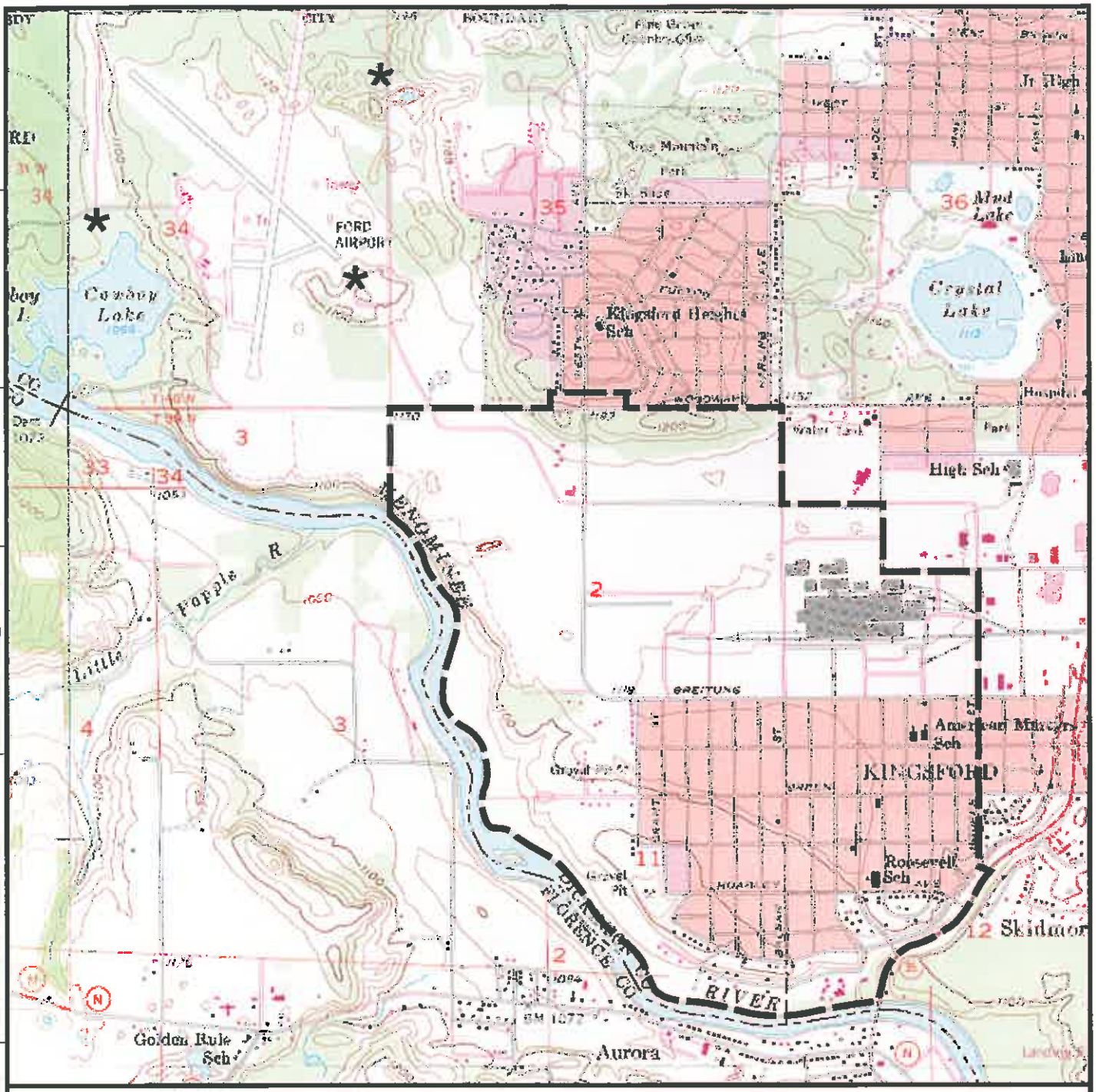
Section 10: EFFECTIVE DATE. This Ordinance shall become effective twenty-one (21) days after its adoption.

ADOPTED: _____

_____
Mayor

EFFECTIVE: _____

_____
Darryl K. Wickman
City Clerk/Manager



SOURCE: USGS 7.5 Minute Topographic Map, IRON MOUNTAIN, MICHIGAN Quadrangle, 1955 Photorevised 1982

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SCALE IN FEET

AREA OF CONCERN

KINGSFORD CITY WATER SUPPLY WELLS

MICHIGAN

DRAFTER: LMB | APPROVED: | CHECKED: MS | DRAWING: SITE_LOC.AI | FILE NO.: GRAPHICS\GW IRAP | PN: FORDWI0637\CJ2009 | DWG DATE: 28JAN09

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SITE LOCATION MAP

FORD-KINGSFORD PRODUCTS
KINGSFORD, MICHIGAN

FIGURE

1-1